Co-operation between Universities in Web-based Learning -

Management Issues

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ABSTRACT

Based on the case of eight Colleges which cooperated in the delivery of common educational provision across all the Colleges by means of a Web-based learning environment, the paper identifies some of the reasons which lead institutions to engage in web-based learning, the reasons some seek collaborative arrangements and factors which dissuade institutions from participating. It discusses the factors that need to be addressed in reaching a cooperative agreement.

Keywords

Cooperation web-based learning, resource allocation distributed university working across boundaries

WHY DOES A UNIVERSITY ENGAGE IN WEB BASED LEARNING

Before we consider why universities cooperate in web based learning it is worth addressing why a university would wish in the first instance to engage in web-based learning, and in order to address that question we need to refer back to the basic functions and purposes of a university as an organisation and as an educational institution. The basic purpose of a university is to promote and advance scholarship in all its various aspects; and the legitimate functions of a university have been identified as anything which promotes its purpose and, in particular, any action which:

supports the business of the university,

is necessary for the proper management of the university,

enables a beneficial initiative to be advanced,

helps the University to respond to external demands,

responds beneficially to its stakeholders: government, funders community, students, employers, etc.

The adoption of web based learning offers a number of attractions to universities; there are disadvantages as well, but first let us look at the attractions. Web based learning allows the university to respond to the demands of its stakeholders and in particular to the expectations of the government and of the community to provide greater access to higher education by those students who are otherwise hindered from entering HE because of constraints of time and space. It also allows the university to access different categories of students and to explore new catchments. It thus allows the university to accept more students and this will generally mean an increased income.

Although in virtually every university there are many examples of staff taking advantage of web based learning; not all universities engage in web based learning as part of the institution's strategy. In many cases, the innovators and adapters are developing their approach to learning and teaching irrespective of the university and its outlook rather than in response to a university initiative.

A university will generally adopt web based learning as part of its overall development when it is seen as essential for the university's success, for example to fulfill student targets or to access new students catchment areas or to meet important commitments to stakeholders; or to gain competitive market advantage or when it is seen as an opportunity to engage in an initiative which will be a significant benefit to the institution. The other driving imperative for universities is the reduction of costs. Many universities are turning to some form of web based learning in expectation that it may lead to a reduction in unit costs, through economies of scale. The reasons academic staff are developing web based learning is because it can be more effective than traditional forms of teaching to develop certain key educational skills and because it allows an openness and flexibility which is of value to higher education students. This is an advantage well recognised but of itself it is unlikely to impel university policy

WHY DO UNIVERSITIES CO-OPERATE

Cooperation between universities may take different forms; it can be operational or strategic, between groups within the universities or between the institutions themselves. This paper concentrates on the case where the cooperation is at an institutional level since only there can the full benefits of cooperation be achieved. A university will choose to cooperate with others when that cooperation is of benefit to it as an institution; ie a benefit in resources, in expertise or in time. Cooperative agreements have been reached which recognise the following benefits:

sharing of developmental costs; - this can be in the form of material, licences, systems, staff developmental or management costs,

sharing operational costs, - such as the costs of teaching and of quality assurance which can allow economies of scale

increased range of skills and of curriculum arising from the various strengths of the different partners , and hence an increase in the quality of provision

the sharing good practice and staff expertise

increased opportunities for funding; - educational and developmental funding seems to be preferentially allocated to joint and collaborating bids

raising the public profiles of the participating institutions

Why then does a university does **not** co-operate with other institutions in the development of web based learning? What are the factors that militate against such cooperation? There will be some reasons why a university will not engage in web based learning irrespective of collaborating mechanisms, primary among these will be uncertainty as to whether the potential benefits are real, for example will the expected economic benefits really happen, there may be conflicting evidence on this. Also the university may have at that particular time other priorities eg developing research for a RAE. The elements which disfavour cooperation amongst university senior staff include:

the loss of control of the decision making

the increased complexity of decision making

the increased costs arising from a collaboration process

On a more positive note what are the factors, which makes cooperation between universities more likely to be successful? The intention to develop web based learning, as part of the institution's overall plan will work best when:

there is top management commitment, and there is an identified leader or 'champion'

there are appropriate funding allocations and redistributions, and appropriate staff allocations within the institution to allow the development to go forward; this is helped enormously if there is an additional fund available above the normal university budget eg an external project fund which reduces the need to reallocate existing funds and hence removes potential sources of antagonism

it builds on existing staff enthusiasm or even existing staff initiatives in this area.

THE CO-OPERATIVE AGREEMENT

In any cooperative venture there needs to be an explicit or implicit cooperative agreement. Web based learning is a process which affects the operation of almost every part of a university's functioning, and the elements which must be addressed in a cooperative agreement are more extensive than are initially perceived by the parties in most such collaborative ventures. The crucial point at each stage is to define very precisely what is needed and to determine where rests the responsibility for that particular function. Is the responsibility to be

that of each university working separately in its own area of operation, or

one particular university operating on behalf of the cooperating partners for that function, or

a joint operating entity operating on behalf of all the cooperating universities, or

some more sophisticated arrangement.

To illustrate the options take the example of a joint web-based course. The cooperating universities could agree an admission process in which

each university admits its own students to the course, or

one particular university takes responsibility for that particular function and admits all students to the joint course, or

a joint admission office is set up, or

some other shared arrangement

The allocating of the responsibility for carrying out the specific functions will be determined in relation to criteria of:

effectiveness and efficiency, - it should exploit the relative strengths of the collaborating institutions, and

politically acceptable, - the distribution must satisfy all the co-operating parties.

The following paragraphs itemise some of the functions to be addressed in any cooperative venture. Many of these functions are removed from the normal concerns of academic members of staff, but since it is they who often drive such initiatives, to overlook any of these factors can imperil the success of the cooperative venture.

Aims and project management

Like any major project, success depends on an accurate business analysis of the project.

Has the market been properly identified?

Has the development been planned to meet that market?

Is there a clear business plan; is the funding stream clear?

Is the project team set up to organise the project adequate?

Is the project achievable, in time and to budget?

Who provides the support and the line management for the project?

Academic issues

Student registration

The administration issues most closely related to the academic operation of the course arise mainly in the case of a shared or jointly developed course. Decisions for a cooperative development are needed as to

whose students they are, who is responsible for disciplinary and legal issues, and on whose returns should they be registered

who takes responsibility for their admission and registration, for their records of progression, their academic credit, and their graduation

who provides student support, tutorial support and student services

Credit transfer

A crucial issue in any cooperative venture is whether educational credit is cumulative and transferable across the institutions, without this the benefits of cooperation, certainly to the student are limited. Related questions then are

who initiates, who develops, who delivers who tutors and who assesses the course. The introduction of web based learning into any learning situation allows differentiation in the functions of teaching and the responsibilities can be shared and hence the options and the number of decisions increase.

for whose awards are the students eligible?

Where does the responsibility for quality assurance lie?

Intellectual property rights

The employer of a member of staff can claim ownership of work carried out by that member of staff as part of his or her paid employment. In the case of co-operative work there needs to be clarity as to whether the material developed for joint use belongs to one or other university, or to both jointly, or whether both can use it internally but one retains the right to exploit it externally, or alternatively in the case of external funding does it belong to the agency funding the development. Related to that is who is responsible for ensuring copyright clearance for the material

Quality and standards

The quality and standards f the material produced needs to meet commonly agreed standards and a mechanism need to be agreed for the establishment of those standards. The standards will necessarily include the following elements

The bandwidth which participating student will use – This will be affected by where the participating students will be based and it will determine the complexity of the design of the web-based material

The academic quality of the materials in relation to web design, the pedagogic design, the actual subject material and its effectiveness for students

The support available to the students

The technical support available to students in their use of the technology and of the material and to staff in their development of the material.

Web-based material and support

In terms of the development of the educational material who is responsible for all aspects of Instructional design, for the assignation of servers and their maintenance.

Technology and Technological Support

The technological issues surrounding the introduction of Web based learning are well rehearsed and the cooperation between institutions in use of computer and information technologies for web based learning are being addressed through the JISC. See for example JISC[1]. Matters to be decided between institutions include

User support - provision of help for all users, from which requests for help could be routed to the appropriate home.

Technical and hardware support – eg dealing with the provision and support for the servers, ensuring appropriate bandwidth, connectivity,

System administration – eg dealing with web-based databases, with systems for staff and student passwords and access, but not acting as a day-to-day helpdesk

IT infrastructure, developing web based learning, staff development

Is the system robust against damage and failure?

Resource issues

The most critical issue in developing a cooperative arrangement between institutions is the agreement on the distribution of costs and of the expected income. The costs can be divided into capital, developmental, and operational costs. Amongst the developmental costs which can be underestimated or undervalued are the costs of staff development.

The income allocation needs to drive policy and not be neutral nor run counter to it For example if the resource allocation policy is seen by participants to reward cooperation and non-cooperation equally the consequence may well be to retrench to the more traditional non cooperative processes.

Externally funded projects

Many such collaborative ventures are funded as time-limited projects by government or other bodies. They work well whilst their external funding remains, but subsequently decline where the management processes and funding arrangements necessary for their continued and healthy operation have not been embedded within the basic organisation and funding mechanisms of the institutions. Externally funded projects are an excellent way in which to initiate a new venture, but the danger is that the availability of external funds allows the project to be developed outside of the university's normal system of operation. It is not seen as a project intrinsic to the university's operation and it is always something outside of mainstream operation. As a result opportunities to incorporate web based development into the university's basic operation are lost and when the funding draws to an end the university is ill-prepared to continue the project and it falters or dies.

A PARTICULAR CASE

Cooperation amongst eight colleges

The above section of the paper draws on, but is not limited to, the author's experience of eight Colleges in the Highlands and Islands of Scotland, each with its own character and tradition which agreed to collaborate in the delivery of common educational provision across all the Colleges by means of Web-based learning environment. The Colleges cooperated to offer common courses (modules) across all campuses and at additional learning centres with the intention that students from any campus and even students not based at a particular campus could register for any of the courses. Students would register at a College campus and would receive student support services from that centre. Each course would be the responsibility of one College which would provide subject based support to all students registered on that course. Co-ordination was achieved by a centrally organised representative committee.

Benefits and consequences

For the student

The students in this case had increased access to higher education, which would not have been possible without the combination of the web-based learning and the cooperation of the various institutions. They had increased geographical access in that they could access HE from areas which hitherto had not provided that opportunity and they had an increased selection of courses arising from the cooperation. They received subject based advice through the web based delivery and they received student services support through their local site.

The primary consequence for staff involved in the developmental process was a lot of extra demanding work. In general this was accepted as a challenging and interesting development. Not all institutions were able to reduce the staffs' existing workload sufficiently to allow for the new development work and this resulted in overloads. In general staff benefited from programmes of staff development in aspects of web based learning, and in the participation in cooperative ventures with staff from other institutions. Some staff feared a loss of job security once 'their expertise and work' was available for others to use.

For the participating institutions?

The project was predicated on the proposition that the institution responsible for the delivery of a module would receive 65% of the student based funding for all students registered on that module, and that the institution where the student was registered would receive 35% of the student based funding for providing the student with basic services. The project allowed for a reduction in duplicated teaching in very similar material in different institutions, and hence a more efficient use of manpower in those institutions.

One of the unexpected outcomes was reluctance by a number of the institutions fully to accept the concept of 'shared sovereignty'. Long term benefits can sometimes be achieved only where an institution is prepared to forego its normal full independent decision making powers. This was most apparent in the reluctance by some to accept the long-term benefits of allowing another institution to teach 'its' students.

CONCLUSIONS

Success ?

How does one measure a successful cooperation. This must be seen from the students' perspective.

Can the student take a complete programme without travel

Do more students have access to education

Do students have greater choice

Can a student access all student services easily?

Is there a consistency of operation, eg fees across the collaborating institutions

REFERENCES

JISC Assist Collaborative Working Workshop April1998 http://www.jisc.ac.uk/pub98/assist2.html/