# A case study of Inter-Institutional Collaboration- A Tale of Two Cities?

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#### Abstract.

This paper will discuss the extent to which institutions are ready for collaborative relationships and will consider the operational difficulties and complexities of communication between partners at an institutional level. The case will examine the relationship between members of academic staff at Glasgow Caledonian University (GCAL) and Queen Margaret University College (QMUC) within a collaborative research project in the area of web-based learning. Whilst this account presents merely the data of one web-based learning implementation, the nature of the problems suggest that they might not be unique across the sector.

#### 1.- Introduction.

The initial contact for collaborative research emerged in January 1999 from an opportunely timed discussion on the use of technology in learning and teaching. Staff at both institutions were aware of the desirability of a collaborative research venture in order to enhance research capacity, seek external funding and to develop web-based teaching expertise. Staff at QMUC had experience in web-based module development and staff at GCAL had experience in case-based learning. It was felt both by the direct researchers and by their line managers that collaboration between both institutions could enhance each other's areas of expertise.

Before links of formal collaboration were established, it was considered important to identify areas of "shared vision" between the prospective partners. Wheeler et al (1995) proposed a conceptual framework for assessing the implications of collaborative activities and stressed the importance of a "shared vision". QMUC and GCAL both have specific policies that stress commitment to lifelong learning, use of CIT and facilitating access to educational material is evident in their strategic planning documents (GCU, 1993/4, 1991; QMUC 1997). Moreover both institutions have recognised the need to enhance the provision of educational material not only to students with a conventional profile but to facilitate the incorporation of direct entrants and mature students. This latter policy responds to the need to increase access to part-time students and mature students.

The analysis of the mission statements of the two organisations showed that they both had a similar vision for educational provision and very similar technological infrastructures. Policy statements of both specifically identify co-operation with other institutions as a way of exploiting the full potential of computer networks and the investment in facilities and training. Finally both HEI sought to attain a better allocation and use of financial and manpower resources and achieve cost efficiencies in encouraging remote access and distance learning. This convergence of objectives strengthened the case for a successful collaboration. The researchers were confident that this evidence of shared vision would provide support to embark on a collaborative bid for external funding to develop a web-based learning environment.

2.- The Project.

QMUC had developed a platform independent shell to host the development of educational resources across different departments in its two campuses. The shell supported:

- internal searching facilities,
- email,
- a conference space
- FAO.
- textual material,
- graphics,
- full text access to selected readings within a digital library experience
- interactive booklets and
- links to related educational sites.

These developments were done through use of shareware. The applicability of the shell and its content had been tested within QMUC since 1997 on typical student cohorts of 150 first year students in the social sciences. The module sought to develop information literacy and research skills in first year social science students and was a core requirement for a number of first year students from several departments within QMUC. The web-based material was used in the first year as a supplement to face to face contact, and during its second year of implementation lectures were replaced with activity based seminars. This meant a gradual ease of face to face contact of lecture times and an increased use of face to face time in seminars supplemented by asynchronous group discussions through the conference space. The web-based environment and module were tested through questionnaire and focus group approaches (Cano, 1998). As a result of this evaluation, staff at QMUC wished to incorporate desk-top-video conference technology to facilitate synchronous communication at a distance, and therefore enhance its possibilities of delivery of this module on a completely distance-based mode.

GCAL's module sought to develop quantitative research competencies with second year students in the Business faculty. The module was also a core requirement for a number departments at GCAL. Lecturers at both institutions felt that the similarity in content of both modules would facilitate any collaboration in the joint development of a web-based learning environment.

In addition to the above, both staff at GCAL and QMUC felt that industry demands increasing flexibility from graduates to operate in a distributed environment. Students have to graduate with sufficient information and computer skills to be able to work and co-operate at a distance. Teleworking and teleco-operating via diverse forms of GroupWare is a reality for innovative information intensive industries in Scotland. It was felt that students needed to be aware of this new reality through their learning experiences in HE. In other words, students needed to tele-learn in order for them to tele-cooperate and tele-work in their future working life.

A bid for a project that involved students at both institutions to work in groups and telecooperate via desktop video conferencing within a case-based educational scenario was successful in attracting external research funding. The funding made provision for the purchase of 2 DVC suites, a server and research assistant support.

### 3.- Challenges in Implementation.

After the funding was confirmed the first step was to specify the requirements of the DVC labs. This was done through co-operation with a member of staff from another HEI who was also a project leader in web-based learning environments. The hardware and software specifications were completed via video conferencing and purchase orders were made.

It was at this point that the real issues began to arise.

#### 3.1.- Quality Assurance Problems.

Both institutions were undergoing major programme reviews. The review within QMUC was a routine programme-wide quality assurance procedure. The Faculty of Business at GCU as part of a review provision was being restructured and there was suspension of new module development until the structure and governance processes were finalised. Both researchers had to revalidate the modules with the new ICT provision in order to satisfy institutional quality assurance requirements. Since there was a large number of students taking part in the project (150+) it was essential that the outcomes for each group of students were considered by programme boards, subject quality groups and academic standards – all of which took time and no inconsiderable effort preparing the appropriate paperwork for each submission.

The schedule of the validation procedure at both institutions slowed the project as web-based content could not be developed until the validating exercise was finished and the prescribed content approved. This was not a major problem but it added to the administrative load of the project and more significantly, it added a measure of insecurity to the future validity of the research results as a number of departments in both institutions could opt out of the module as a result of the programme changes. A significant reduction in the number of students that would matriculate in the new ICT enhanced modules could compromise the validity of the research.

The modules got validated through all the appropriate bodies and groups and although the original student numbers were reduced the final cohort (80+) was large enough not to compromise the project. However the project group went through significant stress.

#### 3.2.- Technological Problems.

Due to policy decisions made at GCU between the initial bid and the confirmation of funding, the original specification for the first test workstation was inappropriate. The university had changed its policy towards an integrated IT system and had taken the decision to move to Windows NT. Although the workstation was functional, additional peripherals were needed in order to interact successfully with NetMeeting, the software chosen to manage the DVC. Similarly, once the other workstations arrived, testing begun prior to the arrival of students. It soon became apparent that the purchasing unit at QMUC had accepted equipment below the required and previously accepted specification. Amends were made and further peripherals purchased and installed to make the units operational. This added delays and frustration. These two examples show that the ITC policies both in purchasing, and in overall infrastructure development were taken with no regard for research projects which depended on compatibility across systems. The life of the project required interaction with a number of units across both HEI and there were obstacles in each turn.

Staff at both institutions had planned on the launch to the video conferencing activities through a ceremonial kick-off at both HEI large video conferencing facilities, with all the students (80+) present. This could not be done although rescheduled at two occasions because the GCAL suite was not installed on time, and during the second try, students were called off

on another module to attend the presentations of a Master Chef (they are tourism and hospitality students). There was no major educational loss here, but again frustration at the lack of co-ordination on unit installations and availability with the faculty needs became evident.

3.3.- Housing Problems.

The DVC suites had to be placed within accessible areas to the student populations, but also within secure areas, due to the perceived novelty of the equipment. Requirements for security were specified at the time of the purchasing. However, this requirement got caught within a Faculty reallocation of space within QMUC. Space was allocated within a secure area but below the specifications required in wait of the permanent location. The office of the DVC unit got broken into and some minor equipment stolen. Throughout the search for permanent housing for the DVC unit, the project now was dealing with "estates". This administrative unit was aware of the requirements specified and although sympathetic to the problem could do very little until full approval and costing for the building of the permanent location were given.

## 4.- Lessons Learnt.

A web-based learning research project interacts per force with quality assurance procedures, curriculum development bodies, IT facilities, procurement mechanisms, library, registry and the student body. A simple implementation quickly brings to light infrastructural fissures in practically every aspect of the HE institution involved. By the nature of its development web-based learning projects require the co-ordinated approach of many different sections within the university, and when this integration is lacking, there is the impression that the left hand does not know what the right hand is doing. Projects suffer from the lack of integration, particularly between the IT departments and Student services departments.

It would be unfair to suggest that support was not offered in this project. In most of the situations encountered the problems were solved with the goodwill and extraordinary effort of many people. Whilst none of the problems were insurmountable the sheer number of irritations serve to illustrate that there are issued to be addressed. It is worth noting that whenever issues arose regarding the overall strategy of the HEIs or the spending of resources, it became much more difficult to achieve a satisfactory outcome.

At the proposal stage it had been obvious that both institutions were of a similar mindsetthey had both identified mission statements which identified and encouraged the development of alternative sources of access for students. Both deans had been enthusiastic about the project right from the start. The promises of resources were real and have for the most part been delivered. None of the problems could have been foreseen and if viewed in perspective could not be said to have halted the project. However, each of these points are evidence of lack of a favourable environment to support web-based implementations.

Web-based learning projects are somewhat innovative ways of teaching whether single institution based, or collaborative based. By nature of the technology they use and because they integrate a multiplicity of resources they impact across practically all other sections and departments across the campus. Face to face teaching does not require these high levels of infrastructural integration. HEI's are geared to support face to face teaching and learning and their infrastructures and procedures reflect this face-to-face approach. The policies speak of increased access, strategic alliances, collaborative development and collaborative research, however the practices do not yet reflect the strategic visions nor allow for a seamless approach to web-based learning.

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