

Chapter 1.

Background to the Project

Change in Higher Education

Higher Education is at present undergoing a period of rapid and fundamental change. It is faced with demands from both government and individuals: that it should be open to a greater proportion of the population and to entrants from all backgrounds, including the disadvantaged and disabled; that it should be more responsive to the needs of students and to their career and life choices; that its practices should be focussed on enabling student learning and adding value to individual capabilities; that it should be available throughout adult life, to be taken up when needed and accumulated in small pieces from different sources; that it should be available through a variety of attendance patterns (full-time, part-time, campus-based, distance), and delivery modes (tutor-led, open learning, C&IT-supported, etc.). For most institutions of higher education, these demands require a response, for they come at a time when increasing international competitiveness and the ongoing straitening of public funding also oblige universities to consider their mission, goals, core activities and target clientele in a more focused and hard-headed manner that has hitherto been necessary.

Integral to this response is the re-forming of the learning environment. The learning environment offers the student a **curriculum** - knowledge, intellectual methodologies, practical skills and competencies, even attitudes which need to be developed - and a **pedagogy** - a means of addressing the curriculum - and it requires **resources** to be deployed to enable it. The learning environment is currently undergoing major change:

- i. It is becoming more student-focused, so that the process and experience of learning become the prime considerations in preparing and delivering a course;
- ii. It is becoming more interactive, so that increasing value is attached to collaborative activities and to dialogue between learners, and between learners and teachers.
- iii. It is becoming more consumer-oriented, in that students are becoming more demanding and more critical in the selection of courses for study;
- iv. It is becoming more diffuse, in that a wider range of methods of delivery, and of learning tasks is now available for use;
- v. It is becoming more C&IT-rich, with C&IT tools available for accessing, processing and presenting information, for document creation, for interaction between students and between students and tutors, and for interactive delivery of learning materials.

The learning environment is a cultural object, created and sustained through conscious decision-making based upon ideas of what is desirable and proper, of the content of the curriculum, of the appropriateness of types of learning event, and of the deployment of available resources (including human ones). Any major change in the learning environment - and that is what is currently taking place - requires therefore something of

a cultural shift, a re-understanding of what it means to be involved in higher education, for both students and their teachers. To be fully successful, it requires a change not only in practices, but also in understandings and ultimately in beliefs. For some, the cultural change will be unproblematic, and intervention is unnecessary. But for many, the opportunity to derive most benefit from the evolving learning environment must be nurtured; whether students or staff, they need to be acculturated into some or all aspects of the learning environment, to be inducted into new modes of working and new attitudes to learning.

The C&IT-rich Learning Environment

The learning environment is becoming C&IT-rich. C&IT has impacted upon all three elements (curriculum, pedagogy, resource-deployment). The curriculum has evolved to include both C&IT-based methodologies, such as the use of database or spreadsheet, and the content and concept development which they permit. Pedagogical options have incorporated not only C&IT-based tasks, such as database-querying, but also C&IT-based learning delivery systems, ranging from single-task CAL programs through Computer Mediated Communication (CMC – the use of online discussion fora and email) to all-inclusive on-line courses offering multimedia presentation of content, automated assessment, and email contact with tutors, other students, and the course administration. And C&IT hardware and software is now a central item in the acquisition and deployment of resources for any educational system. The current topic of debate in many institutions is whether to adopt for institution-wide use a Virtual Learning Environment (VLE), which will allow students access to all their information needs through a single computer interface, or a Managed Learning Environment (MLE), which links the VLE into the institution's entire information infrastructure, including all its administrative data. A number of such systems are now available, although it is probable that these represent early versions of a tool which has much further development yet to undergo.

As they encounter the C&IT-rich learning environment, students can, if they are able and willing, draw upon C&IT-enabled modes of accessing, transforming, communicating knowledge, of interacting with others, and of organising and enhancing their own learning. However, in order to do these things successfully, they must:

- i. adopt C&IT-enabled modes into their views of what constitute the normal activities and artefacts of higher education;
- ii. master the tools and practices necessary to address C&IT-enabled modes; and
- iii. reflect on the role of C&IT in their own learning activities.

Whilst some students arrive at university with these attitudes and competencies already developed, others arrive with little or nothing of either, and many arrive with them fragmented or partially-developed. It therefore makes sense, in terms of both culture and practice, for the university which is developing a C&IT-rich learning environment to take specific measures to ensure that all students are C&IT-empowered, and that this happens as rapidly as possible. Student C&IT induction is thus an issue facing every HEI which intends to develop a C&IT-rich learning environment (and there are very few for whom this would not be a central goal).