# Dublin City University New Library – A Library for the Information Age

by PAUL SHEEHAN

This paper looks at the development of Dublin City University (DCU), and at factors which have influenced the design of the new DCU Library, which is under construction and will be completed in July 2000. The library will be operational from September 2000.

### **DUBLIN CITY UNIVERSITY**

Dublin City University is a new Irish university, founded by a statute in 1989.

DCU currently has 11,000 students, of whom approximately 5,500 are full-time undergraduate students.

The university has three main characteristics. It is a centre of innovation in learning and research; it is a force for change in the local community; and it has established close relationships with private sector organizations.

From its foundation as a National Institute of Higher Education in 1980, the institution has had a reputation for innovation in teaching, learning and research. Its undergraduate degrees were very popular with students and employers because they allowed the combination of technical subjects and languages, and because almost all courses provided for a student placement in a related work environment. These attributes, combined with a rigorous emphasis on quality procedures, ensured that even when Irish national economic activity was relatively flat, in the late 1980s and early 1990s, DCU students found employment very easily. In recent times, the research activities of the university have been assisted by success in competition for government research funding. In early 2000 the university was granted 25m Euros to establish three new research centres in plasma, sensor and communications and information technology research.

The university has sought to be a force in its community. It is located in the northern suburbs of Dublin, and close to an area of social deprivation. It is one of the most significant institutions in north Dublin, and it has developed community links to increase its profile in the local community and to encourage greater university attendance.

DCU has sought to develop partnerships with the private sector, and manages these contacts through the Office of Innovation and Business Relations. It has been successful in initiating projects with private sector partners, and in raising significant funds for a major building programme from the private sector. The new library funding model followed this pattern, with half of the total cost of 22m Euros being raised from private donors.

#### **DUBLIN CITY UNIVERSITY LIBRARY**

DCU library, because it was a library in a new institution, has worked with relatively small collections and until now, unsuitable accommodation. However, its strengths has been its emphasis on services, and a commitment to innovation and quality. It has always sought to be an open and welcoming environment for the academic community. From the outset the library developed a culture of teamwork, and this remains the essential element which underpins its services.

An example of innovation in DCU library was the recognition the importance of Information Skills teaching. That is, the provision of formal, generic information skills training in an iterative process designed to provide tuition at the appropriate points in students' university careers. This has grown to the extent that in the first semester of the 1999-2000 academic year, the library provided 120 class hours of such training to more than 1,000 students.

The library has supported the university mission with regard to the local community by providing special access, and information sessions, to groups of children and students throughout the year.

#### **DUBLIN CITY UNIVERSITY NEW LIBRARY**

When it was decided that DCU needed a new library building, the Director of Library Services at that time, Dr. Alan MacDougall led a task group, including the selected library architects, the firm of Scott, Tallon Walker of Dublin, which investigated contemporary examples of academic library design in

Europe and the USA. The final design reflected observations of innovation and good practice made during those investigations.

The first objective of the new library was to support the university mission, which is:

"to be a catalyst in realising Ireland's potential for the information age".

This is related to the Irish government's promotion of the concept of the Information Society, which encompasses the development of information and communication applications for the worlds of learning and research; for industry and commerce; but also, and crucially, for society, because in future active citizenship will require information skills.

The new library was designed in a context where the role of the library in the university is under scrutiny, because of a revolution in the information world, and a changing learning and research environment. Consequently, the second major design objective was to facilitate new roles for the university library at a time when some traditional roles, for example the library as the unique custodian of learned information, were being eroded by changes in the communications and information technology industry.

The design concept embodied several central values.

- The new library was to be a powerful institutional statement, signifying a confident university, and a university confident in the quality of its library.
- The library was to be a social and intellectual hub of the university. The social context of learning is still of central importance in university life, and the library space both facilitates this interaction and embodies this value.
- The library was to be an environment which would facilitate new modes
  of learning and research; this was particularly relevant in the context of
  group learning.
- The library was to be the gateway between the university and the local community. It would be a serviced space to which the university could welcome members of the community.
- Finally the library would be an environment where relationships between the DCU academic community and private sector partners would be facilitated.

### **DESIGN PHILOSOPHY**

The library was to be open, bright and welcoming, but also functional. As regards functionality, the library was to allow fully integrated access to information, regardless of the delivery medium. This meant, for example, that underfloor wiring was required to carry power and data connections to all potential reader positions.

The library was to embody high quality in its design and in the materials used. It was also to be a flexible building, which would allow the reconfiguration of space for future specialized uses, rather than just a building which could be extended to permit such use.

The position of the library, at the eastern end of the main mall which links all the university buildings, balances the western cluster of buildings and provides a focal point on the campus.

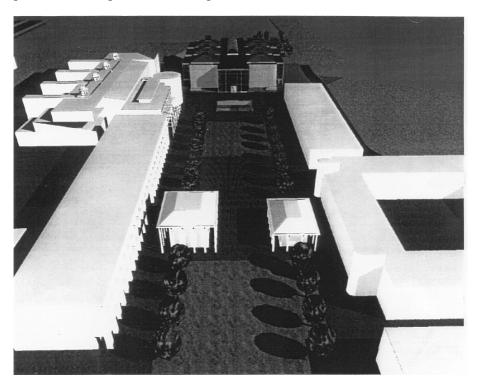


Figure 1: Plan view of university

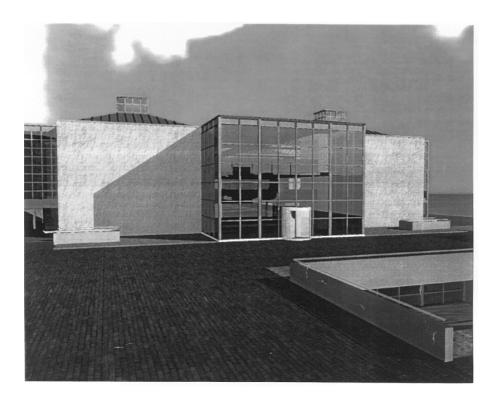


Figure 2: Front elevation of the library

The front elevation of the library displays an entrance atrium, which is full height and glazed, flanked by walls clad in granite. Entry is through a three leaf revolving door. This leads to a lobby, then access gates into the secured area of the library. At this point the reader is faced by a stairwell which achieves the qualities of openness and brightness and lightens the mass of the building.

This stairwell continues the line of the west-east axis which is the main campus circulation route, into the building. It penetrates the core of the building, allowing for future expansion which will occur on this axis, as well as flooding the centre of the building with light from a longitudinal skylight which arches over the length of the stairwell.



Figure 3: Stairwell

The flexibility of the building is well illustrated by this graphic of the top floor, looking across the stairwell to the north (see Figure 4).

The elements in this view are all re-configurable for possible future uses. The current design places book stacks next to the stairwell and reader positions beyond, in naturally lit areas next to windows.

## **DESIGN PRINCIPLES**

Certain principles of design were regarded as fundamental. Firstly, it was decided to design the building from the inside out, so that the functional relationships would not be determined by the shape of the shell.



Figure 4: Top floor view across stairwell

Secondly, the functional relationships analysis allocated the greater proportion of space to reader accommodation; this presented the challenge of articulating this space so as to give each study position a sense of individual identity. This was achieved by creating cells separated by the main circulation routes.

Finally, the cells would need to be vertically integrated through the building and expressed in external features.

The plan of the second (top) floor illustrates these features (see Figure 5). There are five main clusters of reader positions. Each lies within a cell, created by the intersection of main circulation routes running west-east, parallel to the stairwell and secondary circulation routes running north-south. These routes give access to materials without creating traffic through the reader zones which they bound. Each reader zone is naturally lit by a glazed extension (there are six, three each on the north and south sides of the building) which

defines the cell externally. The individualization of reader areas is accented on this top floor by the cupolas which lie over each area and which are echoed in the furniture disposition.

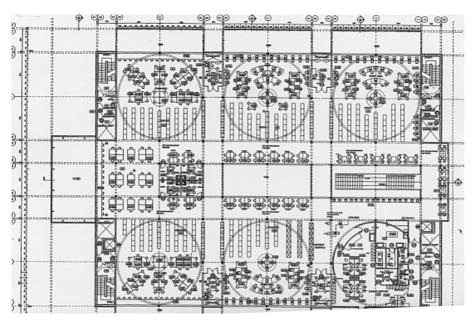


Figure 5: Plan view of second floor

The reader areas are vertically integrated by the glazed extensions, and by the fact the there is a void through each from the first floor to the second (top) floor.

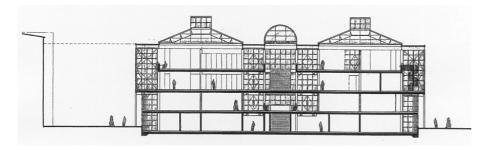


Figure 6: Cross section of building

The cells are expressed externally by means of the glazed extensions, and by the six cupolas, each of which has a lantern at its peak for admitting natural light. This cross-section through the short north-south axis of the building illustrates these features (see Fig. 6).

#### DESIGNED FUNCTIONS

The library was designed to accommodate an area of 10,000 square meters. There will be 1,500 reader places, all capable of full internet connectivity. Initially, it is proposed to implement approximately 400 public PCs. At the first replacement cycle these will probably be replaced with thin client devices.

There will be 18 collaborative study rooms dispersed through the library. These will accommodate from four to eight people, working either formally or informally. It is anticipated that these rooms will be very popular. The library currently provides two collaborative study rooms, which are permanently in demand.

The library mentoring suite is an innovation in Irish academic libraries. This suite will allow students who are advanced in their university careers to give advice to less experienced students. In a learning environment where self-directed learning is becoming more important, this facility will have an important role in placing the library at the centre of the student's university experience.

An Information Commons area will provide a cluster of PCs in an array which will allow individual or group working. It has been observed that students work more and more in groups, either formally or informally, and the library seeks to facilitate this. It is also an important part of the university mission to equip students with skills for the workplace, and the ability to work in groups is an essential feature of modern information industry behaviour. This area is located on the ground floor in the north eastern corner, a position which allows for noise absorption. It is serviced by an integrated information and systems help desk.

The library will have two fully equipped information skills training suites, one to accommodate 30 people and one to accommodate 50 people. Information Skills training is a recognized area of expertise of DCU library and these facilities will allow for its further development.

Information in printed form will of course be important for at least the medium term. There is extensive bookstack accommodation for books and journals. There will also be a Special Collections room for valuable printed material, and an Archives area for manuscripts, and printed materials of record.

#### THE OPEN UNIVERSITY LIBRARY

The role of the university library has been a central feature of cultural development in western societies, and new universities like DCU are also nourished by this tradition.

However, the university is becoming an institution more open to society. This is especially true in Ireland, where universities have been exclusive institutions in all senses of the word. The design of the new DCU library design explicitly embodies values of openess and accessibility, welcoming not just the academic community, but also the local social community and partners from private industry and commerce.

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