

Leicester College: a case study

- **1.** The college had its future space requirements estimated by architects experienced in planning the expansion of college estates. The architects:
 - 1.1 did not identify the future space requirements of the college based on a curriculum plan:
 - 1.2 did not make an assessment of space needs based on expected enrolments or workable timetables for students, staff or proposed rooms.

The estimated space requirements used to design the college estate required more than the available capital funding. The college managers were advised by the Further Education Funding Council to seek the services of the Stellae consultancy and check the required teaching area.



St Matthews Building, Leicester College, based on the modelling of room requirements by the Stellae Consultancy.



Stellae Limited
Corpus Christi House
West Walk
Leicester
LE1 7NA

T +44 (0)116 249 3900 **E** dgr@stellae.com

www.stellae.com



Leicester College: a case study

- 2. A study of the estate plans for the college were based on:
 - 2.1 course provision based on a justified curriculum plan;
 - 2.2 planned student recruitment levels;
 - 2.3 workable timetable for staff, students and room;

The data enabled the building area to be reduced by 7,000 square metres. The estimated costs for the new building were based on a cost of £2,860 per square metre. The capital costs associated with the development of the college estate were reduced by £20 million. The college also made a saving in annual space costs of £700,000. The reduced investment made it possible to retain the development plans for the college estate.

The retention of the 7,000 square metres of space identified by the architects would have required the recruitment of students generating 290,000 teaching hours. Assuming a student has 12 taught hours in each week of a teaching year the additional taught hours represent 670 students. The college had no justified growth plans.

- 3. In most colleges and universities a reduction in the gross internal area is based on an improvement in the space utilisation levels of teaching and learning facilities. The Leicester College was already efficient in its use of existing accommodation.
 - 3.1 The surveyed space utilisation level of teaching facilities was 34%. Teaching rooms were in use for an average of 63% of available hours and when rooms were occupied 54% of student workplaces were in use.
 - 3.2 An analysis of the relative space utilisation levels of college teaching rooms is summarised in the following table.

Space utilisation group	Rooms	RFF	SOF	SUF
Highest (10%)	25	89%	69%	61%
Second highest (10%)	25	81%	60%	50%
Medium (60%)	153	70%	51%	35%
Penultimate (10%)	25	45%	39%	18%
Lowest (10%)	25	26%	35%	9%

There were 14 rooms with a total area of 974 square metres that were not used during the week of the space utilisation survey.

¹ Estimated costs per square metre 2010.

In the further education sector colleges do not have to cover the depreciation of buildings over a 40 year period. In higher education the depreciation of buildings has to be covered and space costs are more than doubled.

- 4. There are a number of options available in calculating space utilisation levels.
 - 4.1 College capacity is based on the college assessment of room capacities. This capacity may be manipulated to inflate space utilisation levels, but the process increases the income required per used student workplace.
 - 4.2 Space norm capacity involves the division of room areas by the relevant space norm. The college capacity may differ from the space norm capacity by approximately 5%.
 - 4.3 Colleges may locate groups in rooms that exceed the stated room capacity. In this situation the size of the largest group is taken as the room capacity. This approach defines the maximum capacity and it is used to calculate seat occupancy and space utilisation levels.

The different methods used to calculate room and college capacities have an impact on space utilisation levels.

Capacity	College workplaces	Space utilisation
College	5,056	37.3%
Maximum	5,568	33.9%
Space norm	5,352	35.2%

College room capacities are exceeded by group sizes in 105 rooms, or 39% of the 267 rooms included in the space utilisation survey.

5. An analysis of space resources in colleges led to a number of recommendations. An important proposal was that the area of teaching and learning facilities should represent half the gross internal area of a college. On the Leicester College estate only 42% of the total area represents teaching space. The loading of all space costs onto the revenue generating teaching area will have a disproportional effect on used workplace income.

The maintenance of effective teaching facilities and the attainment of target space utilisation levels make a very significant contribution to the financial viability of a college. The over-provision of space resources increases the pressure to reduce staff numbers and staff salaries, which are the main elements of college expenditure.