

Case study 11

A law degree offered by the Catalan Open University in Barcelona/Spain

The 'Universitat Oberta de Catalunya' (UOC) has been in operation only since 1995. It was legally approved by the Catalan government in April 1995 and went into operation in the same year. Its remit is to offer distance education to the population of the region taking into consideration its specific linguistic and cultural needs. It was constituted as a foundation. The regional government of Catalunya managed to co-opt three private but public-oriented corporations into the foundation: the Federation of Chambers of Commerce, the regional Radio and TV Corporations and the Savings Banks Federation. However, the government of Catalunya is the major shareholder of the foundation with 75% of the total. The three foundation members contribute in ways specific to their profile: the Federation of Chambers of Commerce provides support centres for local students, the TV and Radio Corporations assist in media production, and the Savings Banks Federation offers financial loans to buy the required equipment.

It was stressed that UOC is constructed as a private university whose staff members are not civil servants. However, the Generalidad (i.e. the government of Catalunya) nominates the Rector who in turn nominates his team.

It is worth noting that staff recruitment is not only from universities but also from industry (e.g. a senior manager from an IBM research lab was recruited). If in full operation the UOC intends to operate with not more than 10 full-time academic staff members. Though the university is private, it is obliged to reinvest profits and not to enrich individual or private shareholders. It can also draw support from the traditional university sector so that UOC students have access to other university libraries. Arrangements to share laboratory facilities are envisaged.

The law course: Llicenciatura en Dret

The stated objective of the course is to enable students to exercise the law professions, understand and know how to apply the law and acquire an adequate proficiency for the different levels of specialisation within the profession.

The course requires as a minimum four years full-time study and carries 300 CAT points. Of the 300 credits 228 are core credits, 36 can be taken from a choice of options and again 36 may be chosen from a non-related academic area. Each semester between five and seven modules are

studied, each of which carries on the average of six CAT points. The CAT value determines the print input (1 CAT is supported by 50 pages print) and in turn the development budget for the semester since the cost for developing a module is fixed.

To state the important benchmark relationships explicitly:

Course = 300 CAT = 50 modules or 1 module = 6 CAT = 6 x 50 = 300 pages

The pacing is such that no student is allowed to be dormant in the system for more than a year.

Access conditions vary. In principle an equivalent of a British A-level (Baccalaurat) is required. However for students older than 25 years professional experience can also be taken into account.

Table CS 11.1: the law course: credit structure

		No of modules	No of credits
Semester	1	6	29.5
Semester	2	5	32.5
Semester	3	7	41.5
Semester	4	7	42.5
Semester	5	6	34.5
Semester	6	7	41.0
Semester	7	6	38.0
Semester	8	6	40.5
Total		50	300

Source: UOC; all costs in £'97 (at rate £1 = 248.76 PTA)

Resource media: inputs and costs

We indicated that soon after the UOC was constituted, it started to operate. The development of the first course modules was completed under considerable pressure. Pilot versions of the material for 100 students were tried before the course was opened to subscription. The maximum number of students to be enrolled in the course as a whole is 600. The production and development for a course of 30 CAT points is about nine months.

The only medium used for the time being is print. It is, however, planned to operate the whole university over the Internet. It is suggested that this would reduce considerably production costs and increase the efficiency of student support. Development costs would largely be the same as long as one limits oneself to text-based forms of presentation. At the time of the collection of the data, however, this process was not completed and the only medium used for teaching was print.

Table CS 11.2 summarises the development and production budget per semester. There is no clear separation between design cost (fixed) and variable print costs. Since, however, the number of students in a semester is quite limited, we consider the costs largely as fixed costs of development.

Table CS 11.2: Print: inputs and costs/semester

Type of input	Amount	Cost per module	Total cost
Module	6	20 100	120 600
Author related		6 030	36 180
Design & production related		14 070	84 420

Source: UOC; All costs in £'97 (at rate £1 = 248.76 PTA)

The percentage of the development cost which goes to the author is about one-third while two-thirds are design and production related.

Since we have standardised budget allocations the information in table CS 11.1 is sufficient to determine the development costs of the law course as a whole. The total development and production cost amount to £1 005 000 per course. Per semester they are on average £120 600.

Table CS 11.3: print : input and costs per course

	No of modules	No of credits	Cost per semester
Semester 1	6	29.5	120 600
Semester 2	5	32.5	100 500
Semester 3	7	41.5	140 700
Semester 4	7	42.5	140 700
Semester 5	6	34.5	120 600
Semester 6	7	41.0	140 700
Semester 7	6	38.0	120 600
Semester 8	6	40.5	120 600
Total	50	300	1 005 000

Source: UOC; all costs in £'97 (at rate £1 = 248.76 PTA)

Student support: inputs and costs

There are two types of support given to the student: (i) the academic support provided by a tutor and (ii) the more general support given by a counsellor.

Support by the tutor

Student support is based on correspondence and marked assignments. There are no face-to-face tutorials. (In future the tutoring is intended to be done via the Internet.) The number of assignments is not fixed. The tutors determine their number. Consequently tutors are not paid by assignment but employed per semester. They have a markedly responsible role since it is also the tutors who assess students. The group size per tutor is limited to 50.

The cost of the tutor per semester is determined by the following formula:

$$\begin{aligned}\text{Cost of tutor per semester} &= \text{base rate} + \text{variable rate} \times \text{no of students} \times \text{CAT value of module} \\ &= \text{£60} + (\text{£4} \times 50 \times 38) \\ &= \text{£7 660}\end{aligned}$$

Support by the counsellor

Further support is given to student through counsellors: counsellors cater for 75 students and are paid per semester according to the following formula:

$$\begin{aligned}\text{Cost of counsellor per semester} &= \text{base rate} + \text{variable rate} \times \text{no of students} \\ &= \text{£502} + (\text{£17} \times 75) \\ &= \text{£1 777}\end{aligned}$$

As table CS 11.4 indicates, this implies a variable cost per student due to support of £178.

Table CS 11.4: Student support: inputs and costs

	Group size	CAT points	Total cost per semester	Unit cost per semester
Tutoring costs	50	38	7 660	153
Counselling costs	75	n/a	1 777	24
Total			9 437	177

Source: UOC; all costs in £'97 (at rate £1 = 248.76 PTA)

Cost analysis

We base the cost analysis on cost per semester. The cost analysis contains an estimation of average cost per student (per semester) and of cost per student learning hour.

Average cost per student

The average number of students can only be estimated since at the time of the data collection only part of the programme was in operation. The maximum number of students to be admitted will be 600. This would mean, that there are around 75 students in one semester.

No specification is made about the lifetime of a course. We assume that the lifetime will be five years and ignore maintenance costs. For five years we would have 375 students studying the same course material. Then we have:

$$AC = \frac{\pounds 120\,600}{375} + \pounds 178 \Rightarrow$$

$$AC = \pounds 322 + \pounds 178 = \pounds 500$$

Cost per student learning hour

The course carries 300 CAT points, which is considered to be equivalent to 3 000 hours of student learning. The average number of CAT points per semester is 38, which gives us an equivalent of 380 student learning hours. Since 1 CAT represents 10 SLH and is taught by an equivalent of 50 pages of print (i.e. one UE), the cost/SLH(semester) and the cost/SLH(print) are identical. Therefore we get:

$$\text{cost/SLH(print)} = \frac{\pounds 120\,600}{380} + \pounds 178 \Rightarrow$$

$$\text{cost/SLH(print)} = \pounds 317 + \pounds 178 = \pounds 495$$

Summary table of case studies

Currency: Sterling

SLH	AC = $\frac{\text{Fixed costs}}{\text{Student numbers}} + \text{Unit cost}$	C/SLH Course	C/SLH Media	C/SLH Print	C/SLH Audio	C/SLH Video	C/SLH TV	C/SLH CD- ROM	C/SLH VCS	C/SLH (Internet)
CS 1	220 $AC = \frac{£660000}{8000} + £90 = £173$	3 000	4 889	300 – 1 500	1 000 – 16 000	10 000 -				
CS 2	448 $AC = \frac{£2776518}{8000} + £172 = £519$	6 198	7 979 – 9 074			80 000 38 000	121 882	5 054 – 20 414		
CS 3	560 $AC = \frac{£76529}{1500} + £122 = £173$	137	870	165		20 835				
CS 4	700 $AC = \frac{£105003}{638} + £109 = £274$	150	1 024	856		3 159				
CS 5	456 $AC = \frac{£48640}{1500} + £85 = £119$	107	304	304						
CS 6	$AC = \frac{£17000}{1260} + £293 = £306$			189						
CS 7	75 $AC = \frac{£9675}{75} + £134 = £263$	48		139					476	179
CS 8	600 $AC = \frac{£76800}{500} + £75 = £229$	128	244	220	1 746				158	
CS 10	80									163
CS 11	380 $AC = \frac{£120600}{375} + £178 = £500$			495						

Note: a: That numbers were not rounded does not mean that they should not be taken with a grain of salt. We abstain from rounding only to allow to link the numbers more easily to the numbers in the case studies. B: Case study 9 is not listed because of the different cost structure of videoconferencing and the different approach chosen.