

8 : FINANCE AND RESOURCES

If you are starting a new distance-teaching programme, you are likely to ask two questions about finance: what will the programme cost, and will it be cheaper or dearer than the alternative? This chapter suggests ways of approaching both questions.

What will it cost?

As we saw in Chapter 1, distance education can seem attractive when it makes educational expansion possible without new buildings. But any project requires resources: while distance education can make economies by not requiring new schools or colleges to house all its students, it does demand some buildings and some equipment. And it incurs some running costs which are different from those of an ordinary college. The following is a check list of the kinds of capital and recurrent cost which a distance teaching programme may incur. We have made no attempt to put prices on them, but have suggested how an administrator might start to do that.

Capital costs

1. Building - It may be necessary to put up a new building for the project or one may be able to use an existing college, or part of one.
2. Printing equipment - Costs here are dependent on the type of printing chosen, as discussed in Chapter 4.
3. Recording equipment - see Chapter 4.

4. Office equipment - The college will need adequate filing cabinets, housing for student record cards and other records, and typewriters, both for ordinary office use and for the production of masters for printing.
5. Artists'/photographers' equipment - If the institution is to produce photographs, drawings or other visual aids, then professional equipment will be needed.
6. Other reprographic equipment - An offset plate maker may double as a photocopier, but except for very small projects you will probably need a separate photocopier.
7. Vehicles - You may need your own transport for visiting students, for transport to other colleges and study centres, for distributing materials.

Recurrent costs

1. Full-time staff costs - The usual government rates will probably determine these.
2. Part-time staff costs - These are likely to be of two main kinds. First, you may pay some outside writers who are producing courses. It is difficult to determine the appropriate rate for this as there are seldom close precedents. The best approach may be to consider the length of time it should take an author to write the course, and pay at a rate appropriate to his salary. Second, you may employ outsiders as markers to mark correspondence scripts. Here, too, you may be able to base the figure on a notional cost per hour. Or there may be a precedent in the rate paid to those marking external examination papers. In the latter case, correspondence markers could expect to be paid considerably more than examination markers, as their job is to comment and advise as well as to mark, but an examination rate may give a starting point for calculations.

3. Staff travel - Visits to students, to centres where residential courses are taking place, to study centres, and for the delivery of material may all involve staff travel.
4. Student travel - It may be necessary to meet the cost of students' travelling to any place of study.
5. Residence/college costs - If students are attending face-to-face sessions, then the cost of these sessions may fall on the distance-teaching project.
6. Educational materials - Paper, and all the other materials needed to make courses, will form a significant part of the budget.
7. Broadcasting - A broadcasting station may charge a distance-teaching institution for production costs and/or transmission costs. Or, if national policy is to devote broadcasting resources to educational programmes, these costs may be carried by the broadcasting station. If you have to meet the cost, you may be charged a rate appropriate to educational bodies, rather than a commercial rate.
8. Postage and other office running costs - If you are a government institution you may be eligible for free postage for yourself and possibly for your students when returning their work to you.
9. Payment to trainees - You may need to pay a maintenance allowance to students while they attend courses, or pay them something instead of their salary if they lose salary through attendance.

There are three possible sources of income to meet these costs. First, we assume that you will receive a

regular grant from your government or university to cover the main running costs of the project, year-by-year. Second, it will probably be necessary for you to have a separate building or equipment grant to meet the capital costs of starting such a project. In the past, many programmes for teacher training have been financed by international agencies such as UNICEF or Unesco. Third, in some circumstances you may require your students to pay fees. The British Open University, for example, offered courses on teaching reading and on research methods for teachers which were of personal and professional benefit for teachers but did not form part of any national or compulsory programme of teacher upgrading; in these cases fees were charged to the students.

How do the costs compare?

Our second question is deceptively simple: are distance-teaching methods cheaper or dearer than conventional alternatives? The answer is complex.

The costs of distance education behave differently from the costs of conventional education. The latter is labour intensive: often between 66% and 90% of the costs of education are for labour, and comprise the salaries paid to teachers. As the number of students rise, so costs rise more or less in proportion to the number of students. Of course there are ways of economising on labour, by operating two shifts for example, but all have their limit. Sooner or later, the costs are bound to rise with the number of students. In contrast, distance teaching tends to be capital intensive: it demands capital investment, in courses and in equipment for making and delivering them, but once that investment has been made, the costs do not rise in pace with the number of students. So distance teaching will tend to be expensive for small numbers but the cost per student declines as the number of students increases. To put it another way, conventional education has relatively high variable costs (those which vary with the number of students) and low fixed costs (those that stay the same regardless of the number). Distance teaching has low variable costs (mainly the costs of printing paper and of marking) and high fixed costs (involved in making courses).

As a result, the first factor which affects a comparison between distance and conventional education is the size of the project. Generally, the bigger the project, the more likely is distance teaching to work out cheaper per student than the alternative. But two other factors are also important. Where face-to-face tutoring forms part of a distance-teaching project, then the costs of providing it do rise with the number of students. And so, the higher the proportion of face-to-face study in our distance-teaching system, the more difficult it is to keep its costs below that of the conventional alternative. The sophistication of the media used also affect the cost; if a project uses television rather than radio, for example, its costs will be significantly higher.

All three factors - scale, the amount of face-to-face study and the sophistication of our teaching media thus bear upon the costs of any distance-teaching project.

Figure 10 shows this in diagrammatic form. If we can imagine the block as being made up of bricks, each representing a different distance-teaching project, then we can see that the project becomes relatively cheaper as we move from a smaller to a larger target audience, as we move from more sophisticated to less sophisticated media, and as we decrease the face-to-face element. Small, sophisticated projects with much face-to-face tuition are at the opposite extreme, in terms of their comparative costs, from large ones with little face-to-face contact and simple media. Expensive projects are in the top left corner at the back of the diagram, cheap ones in the bottom right at the front. The planner's most difficult and most important job is to determine the line through the diagram along which his project is to be based, balancing the claims of education and economy.

Unfortunately we have too little data to put prices on the bricks in Figure 10. And there are difficulties in knowing what to include in our total costs. Some costs cannot be calculated at all: if we were to take teachers out of the schools, there would be a cost to society as a result of that closure which we cannot compute. Others are so difficult to calculate that we may be tempted to leave them out: the value of the time which trainees spend on their training which they would otherwise spend doing something else is an example.

Leaving those issues aside, the evidence from actual projects is sparse and unclear. The UNRWA/Unesco project for Palestinian refugees and the Swaziland project, with 800 and 600 students a year respectively, both claimed that distance teaching was cheaper than the alternative. The large teacher upgrading project in Tanzania looks as if it will be much cheaper than any full-time, conventional, alternative. In contrast the project in Kenya, with annual enrolments that varied between 350 and 3000 proved more expensive. Distance teaching projects at the level of secondary and higher education have often needed several thousand enrolments a year for the cost per enrolment to fall below that of conventional education. In contrast, some colleges of higher education have run distance-

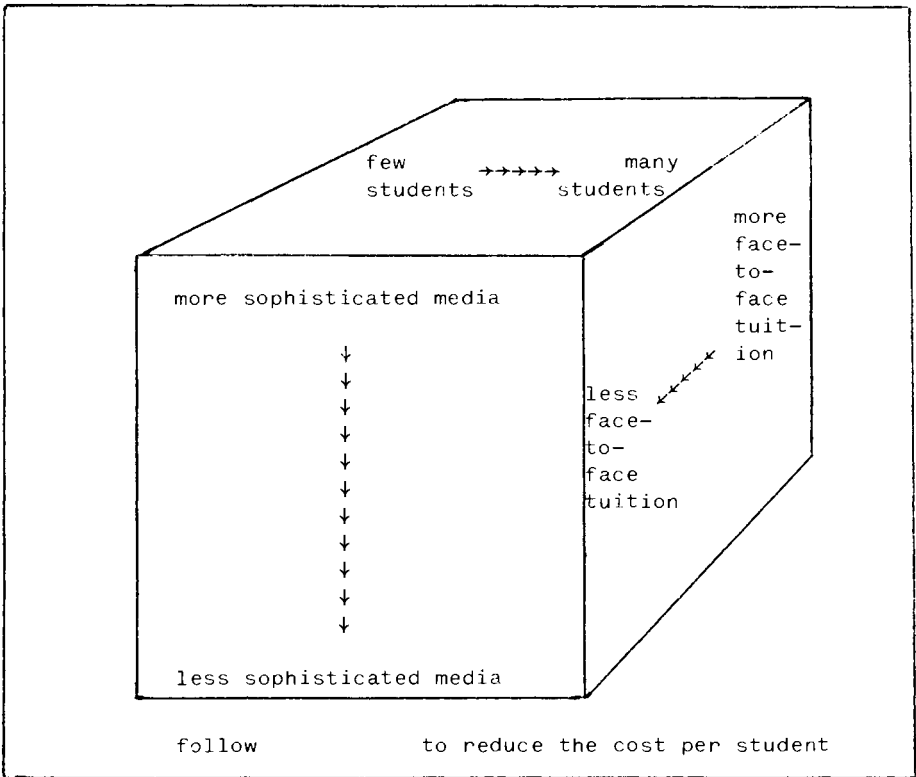


Figure 10 : Factors affecting the cost per student in distance education

teaching courses in a very modest way, as a side line from their main work, and done so in a way that makes economic sense with enrolments of only a few hundred students a year.

All these findings are tentative: we do not yet have the information to make a firm judgement as the evidence is so limited. The only sound advice is to follow the lines suggested earlier and calculate the costs of your own project, and then look at alternative ways of seeking the same end, in order to see how the costs compare.

Summary

1. In planning a project it is useful to have a check-list of likely items of capital and recurrent expenditure.
2. You may get income from a recurrent government/university grant, from an initial equipment grant, and from student fees.
3. The costs of distance teaching behave differently from those of conventional teaching with higher fixed and lower variable costs.
4. The major factors affecting the cost per student of distance teaching are the number of students, the amount of face-to-face study provided, and the sophistication of the teaching methods.
5. We do not know the precise circumstances under which distance teaching will prove cheaper (or dearer) than the alternative and therefore recommend you make a comparison of your expected costs at the planning stage.