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**APPENDIX 1**

**TYPICAL COST ELEMENTS IN DISTANCE-EDUCATION SYSTEMS**

Typical cost elements in distance-education systems are listed below. The list is not exhaustive.

In this Appendix: D = Direct Cost, I = Indirect Cost, V = Variable Cost, and F = Fixed Cost. These are for guidance only.

**Development and redevelopment of materials and courses**

(a) Staff Time

- Academic (D)
- Secretarial (D)
- Editorial (D or I)
- Design (D or I)
- Administrative course or materials support (D or I)

(b) Contracted work

- Academic consultants (D)
- Contracted course authors (D)
- Editorial work (external) (D)
- Design work (external) (D)

(c) Media development

- Purchase of materials (D)
- Computer assisted instruction (D or I)
- Development of support systems (D or I)
- Computer program development (D or I)
- Home experiment kits (D or I)
- Ancillary materials (D or I)
- Tutorial or assessment policy (I)

(d) Academic assessors (D)

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(e) Developmental testing

Cost of materials (D)  
Payment to testers (D)

(f) Discretionary and sundries budget (D)

**Production**

(a) Print fixed costs

Keyboarding, film assembly, pre-press, machine make-ready, cover preparation, cover proofing, cover make-ready (D)

Copyright clearances (D)

(b) Television and Video productions \*

Producer days (D)

Production Assistant days (D)

Research Assistant days (D)

Travel and subsistence allowances and expenses (D)

Studio days (inc. floor managers, studio assistants, cameras) (I)

Film crew - staff (D)

Film crew - expenses (D)

Outside Broadcasting facilities (I)

Hiring premises, locations and facilities (D)

Hired technical equipment (D)

Film lighting equipment (D)

Film stock and processing (D)

Film shooting (I)

Film editing (I)

Film dubbing (I)

Film lighting (I)

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\* Based on A. Hancock (1977) *Planning for Educational Mass Media*, p. 250.

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- Video resources (recording) (I)
- Video tape (D)
- Video editing (I)
- Telecine transfer (I)
- Titling (I)
- Other services (I)
- Hospitality (D)
- Miscellaneous expenses (D)
- Participants' and Artists' Fees (D)
- Participants' and Artists' expenses (D)
- Walkons (D)
- Makeup (D)
- Costume (D)
- Costume staff (I)
- Scenery construction - materials (D)
- Scenery construction - staff (I)
- Scenery projection (I)
- Copyright - purchased film (D)
- Copyright - music (D)
- Purchased Film Library (D)
- Graphics and design - materials (D)
- Graphics and design - staff (I)
- Visual Effects materials (D)
- Model building (D)
- Transport (D)

#### (c) Radio and audio productions

- Studio costs (I)
- Outside broadcasting (I)
- Producer days (D)
- Production Assistant days (D)
- Research Assistant days (D)
- Travel and subsistence (D)
- Editing (I)
- Contributors' fees (D)
- Contributors' expenses (D)
- Copyright - music (D)

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Copyright - other materials (D)  
Production expenses (D)  
Master Tapes (D)

### **Presentation**

(a) Print variable and stocking stocks

Machine working, binding, paper, cover working, cover artboard,  
other materials (DV)

(b) Other materials

Audio cassettes, video cassettes, filmstrips, slides, records,  
scientific equipment, consumables, textbooks, maps, bought-in  
materials (DV if given to students, DF if provided in centres or  
bought in as stock for loan to students)

(c) Storage (I)

(d) Distribution and transmission

Packing (D, V by student courses)  
Postage (D, V by student courses)  
Carriage (D, V by student courses)  
Radio transmission (D, F per transmission)  
Television transmission (D, F per transmission)  
Broadcast repeat fees (D, F per broadcasts)

(e) Teaching costs

Tutor marked assignments and tests (D, V by student courses)  
Computer marked assignments and tests (D, V by student courses)  
Face to face tuition (D, V by groups)  
Telephone tuition (D or I, V by students)  
Tutor expenses (D)  
Tutor training (D, V by tutors)  
Examination centres - hire (D)

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Examinations - invigilation (D)

Examinations - script marking (D, V by student courses)

Laboratory hire (D)

Computer line charges (D)

## **APPENDIX 2 APPORTIONING OVERHEADS**

There is no absolutely right way of apportioning overhead costs to cost centres, activities, programmes, or outputs. The best way is probably one that distributes indirect costs to each cost centre, activity or output in proportion to the services that cost centre, activity or output receives or consumes. Common methods used are based on appropriate student (student credit hours, FTE-students, student headcount) or other measures (FTE-faculty, square footage of assigned space, time comparisons, etc.). Some indirect costs may be allocated on the basis of the proportion of the attributed costs of the cost centre, activity, programme or output to the total attributed costs of all cost centres, activities, programmes or outputs (apportionment on the basis of expenditure). However, this method tends to obscure the uniqueness of each cost centre's (or activity's, programmes's or output's) needs and usage of overhead facilities and fails to identify an adequate measure of use or output against which the allocation is being made.

Appropriate measures for the allocation of overhead costs may differ between conventional and distance-mode programmes. For example, library costs may be allocated:

1. In conventional systems, on the basis of student numbers, however measured.
2. In distance-education systems where libraries predominantly serve the needs of academic course writers and researchers, on the basis of an appropriate count of staff.
3. In some distance systems where students are offered a postal library loan service, on a student or student course number basis.

In each case the approach must be to examine the nature of the costs involved and decide on the best means of apportionment. The following are suggestions:

1. General administrative costs (excluding the costs of student administration and of course management): apportioned to academic cost centres, activities, programmes and outputs on

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an expenditure basis.

2. Personnel administration: apportioned on the basis of staff headcounts. Under this basis the costs of personnel administration might be apportioned to academic units and to general support units. Where it is apportioned to general administrative units, then there is a need for a second stage apportionment of these general administrative costs. This second stage apportionment may best be done on an expenditure or some other appropriate basis. For example, suppose that the total cost of personnel administration is £x and that there are two academic units (cost centres) with 50 and 20 staff respectively, with 30 staff in the administrative unit. The first stage apportionment of personnel costs would be:

*First apportionment:*

	Academic Unit A, 50 staff, £0.5x
Personnel costs £x	Academic Unit B, 20 staff, £0.2x
	Admin Unit, 30 staff, £0.3x

*Second apportionment:*

	Academic Unit A, 5/7 x £0.3x
Admin Unit £0.3x	Academic Unit B, 2/7 x £0.3x

3. Course administration: apportioned on the basis of number of courses, credit hours, etc - either in development or in presentation, as appropriate.
4. Student administration: apportioned on the basis of an

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appropriate method of counting students.

5. Physical plant and maintenance: apportioned on the basis of occupancy or usage in the first instance, and then on the basis of the activities, programmes, or outputs served by the people occupying it or using it. Where it is not directly apportionable, then a second level apportionment will need to be done. This may be on an expenditure basis.
6. Computer centre: allocated on the basis of usage in the first instance, and then on the basis of the relationship of usage to outputs, activities or cost centres. Second level apportionment may need to be done.
7. Libraries: see comments above.
8. Student services: apportioned on the basis of a headcount or some other appropriate measure of students.

A two step apportionment process should result in the apportionment of *all* overhead costs to activities, cost centres, programmes or outputs. For a description of a similar process, see Walters (1981). The means of apportioning overhead costs should not be unduly complex.

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