ABSTRACT
        A 2-year project at the University of Aberdeen
focused on the production of learning materials and the planning of
audiovisual based instruction. Background information on the project
examines its crigins, the nature of course teams, and the evaluation
of the five text-tape programs produced. The report specifies three
project aims: (1) to produce a series of learning packages of
videotape and accompanying text material: (2) to encourage widespread
use of such packages by a process called action research or "team
planning": and (3) to publicize the various development stages to
encourage others to try these techniques. Sample materials appended
include two television scripts, a botany self assessment exercise, a
scenario for law programs, an evaluation (botany), and notes for
viewers (law). (MER)

## RESOURCE BASED LEARNING

An Experience in Planning and Production

A Report to the Nuffield Foundation
on Completion of Grant EDU/GRA/159.

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and
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July, 1980

## ACKNOWLEDGMENTS

We would like to thank all our colleagues who
assisted in this work.  Innovation does not
take place in a vacuum;  people innovate, not
systems.  We  therefore  acknowledge the work
of many un-named friends who helped us in this
work.

Ray McAleese
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July 1980

## Biographical Note

Dr <u>Ray McAleese</u>, is Director of the University
Teaching Centre, University of Aberdeen. His
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Technology</u> and is joint editor and author (with
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Mr John Scobbie, is Production Assistant in the
Television Service, University of Aberdeen. He
is a trained teacher and has worked in educational
and public television for some years.

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## SUMMARY

The project had three aims:-

1. To produce a series of learing
   packages consisting of videotape
   and accompanying text material.
   These packages would consist of:

   VIDEOTAPE - containing visually
                relevant material

Tape-Text      TEXT       - instructions
                            textual information
                            self-assessment tests

   That is 'Resource-Based Learning
     Packages'

2. To encourage the widespread use
   of such packages by a process
   called action research; that is,
   having teachers themselves pro-
   duce the packages, and be
   involved in monitoring and
   evaluating their usefulness.

Action
 Research

   That is 'Team Planning'

3. To publicise the exercise widely
   at the various stages; production;
   evaluation; monitoring, and create
Disseminate    a general interest in the project,
   thus encouraging others to become
   interested and try the techniques.
   (learning packages and team
   planning).

Two packages were made for first year
Botany students, and three for students
on the LL.B. or Diploma in Legal
Practice. The concept of team planning

was found to be useful although the
definition of roles was a problem.
The programmes have been used by
students on a number of occasions
with favourable results. Subsequent
packages would be changed to account
for detailed criticism, e.g. density
of information. A much wider interest
has been shown in the packages (in
**Interest** particular Law) than was expected;
**in Project** with other universities in this country
and abroad being involved.

The costs of the exercise were within
the limits of the original costing
**Labour** exercise, although such television-
**Intensive** text packages are both labour and
**Capital** capital intensive. To some extent
**Intensive** all three aims were achieved, some
more effectively than others.

> Aim 1 was met in the production of
> the materials.
>
> Aim 2 is <u>least</u> well achieved. To date
> no definite plans have been made to
> produce more packages, although the
> planning process is being used.
>
> Aim 3 has been met with publications,
> discussions and evaluations; within
> and outside the university. It is
> estimated that some 35 people were
> involved in the project during its
> two years within Aberdeen.

## 1. Introduction

Final Report

This is the final report of a production which began in the Univeristy of Aberdeen some two years ago, which attempted to pr duce learning materials and throw light on the planning of audiovisual based instruction. The work described here was almost entirely funded by a grant from the Nuffield Foundation under its Small Grant Scheme. This report summarises the background to the project; examines the nature of course teams and undertakes an evaluation of text-tape programmes produced. Programmes were produced for the Department of Botany and the Faculty of Law in the University of Aberdeen. Without the help of many colleagues this project would not have been possible. Without the intervention of the Small Grants Scheme, the project

Nuffield
Support

would have lacked co-ordination from a full-time worker and the impetus of research grant funding. One comment made in the evaluation of the work highlights this:

> "(The award) clarified our thinking at a time when we were moving in that direction in a muddled way .... it was a discipline ... because there was a time scale"

This report is, therefore, an attempt to draw out for others the lessons of one small piece of academic engineering. Its lessons are not in any sense novel, yet they do highlight some of the general issues in an educational technology based system of teaching.

## 2. Background to the Project

This initial substantive chapter is
important as it indicates some of
the features that led us to undertake
the work.

It is too long ago now to say with any
certainty - when the project began, or
indeed, how it began.  In fact, the
recollections of the principal partici-
pants differ considerably.  A composite
view is that discussions within the
university regarding the role of tele-
vision were leading a number of people
to suggest a resource based learning
approach.  It was felt that television,
as the principle audiovisual medium,
could be more widely used if a shift
were made from instructional programmes
to using television as a resource in a
mixed teaching package.  It was also
felt that an attempt should be made to
see if students and teachers could
benefit from an enquiry based style of
learning (that is, resource based
learning).  These ideas were debated
in a faculty television users committee
and a faculty resources group.  There
was some doubt about the underlying
assumptions, but the Director of the
Television Service and Dr McAleese felt
that the resource based idea merrited
close scrutiny.

Shift to
Resource
Based
Learning

Team
  Planning

Planning
  Quartets

At the same time, Dr McAleese was
interested in the concept of team
planning;  in particular, the roles
played by individuals and the way such
roles changed during team work. It was
from work in staff development that Dr
McAleese put forward the idea of
'quartets' in team planning.  That is
subject specialists, media specialists,

students and eductional specialists.
(see McAleese,1978; for an analysis
of "triads" in innovation and course
planning).

**Small Grants Scheme**

By chance, one of the regular advert-
isements from the Nuffield Foundation
Small Grants Scheme appeared in the
national press.  At least two people
involved in the initial discussions
thought that such a scheme might support
a short project in this area.  The
advertisement was timely as there had
been discussions previously about
securing external funds to support
the production of individualised
materials on Law teaching.  One team
member has described the Nuffield
Scheme as catalytical and suggested
that as well as being the 'animateur'
of the work.  The idea that grew out
of discussions was to identify one or
two departments that would provide

**Trial Run**

topics and teachers interested in a
trial run of resource based teaching.
The Law Faculty had been making an
increasing use of television and had
just completed a series of programmes
on Industrial Tribunals.  The Botany
department had been discussing the needs
of first year students and were interest-
ed in exploring the visual impact of
television.  In addition, a senior
member of the Botany department had
become involved in a policy committee
relating to television and,therefore,
had been taking an active interest in
new television projects and likely

**Chance ?**

developments.  This chance occurrence
(i.e. the selection of an academic by
his colleagues to serve a policy
committee) while not directly related
to either the selection of the depart-
ment or the individual, was the serin-
depitious type of event that character-
ised the initial stage of the project.

We suggest that while it is both
desirable to establish objective and
value free reasons for actions, chance
is a strong factor when viewed in
retrospect.  It is probably time to
say that individuals were chosen first,
not subject areas.  This was an important
decision as it turned out.  While the
system approach might dictate that a
problem from an individual would be the
**Importance**
**of People**  starting point, it turned out that
personal factors were important in the
later stages of the project.  Indeed,
a rubric that suggests itself is that
a project must be designed so as to
match both needs to resources and
individuals to individuals.

The Botany department chose two senior
demonstrators to be liason personnel
with the project.  The work in the Law
faculty was mostly handled by the subject
specialist.  And so the project was set
up.  The following chapters of this report
draw out some important points under a
**Overview**  number of separate headings;  course
teams, inter-personal relationships,
costs, etc.  First, however, we summarise
the work undertaken.

## 3.  Work Undertaken

This chapter summarises the audiovisual
work of the project.

**A Learning
Package?**

We set out to produce learning packages.
To date we have  produced videotapes,
questionnaires and notes for students.
Whether this multi-media assortment con-
stitutes a series of learning packages
is a question of definition.  The
emphasis has been on the audiovisual
software, with less time given to the
preparation of accompanying text.  In
a number of ways we have achieved
different results from these set out
in the application.  These differences
show how our thinking changed with
practice, and how we clarified the
vague initial aims.

### BOTANY

**Factual
Packages**

The first two programmes in a projected
series of six or seven have been pro-
duced for use in first year Botany
teaching.  Both learning packages are
primarily factual and attempt to teach
specific topics.  They incorporate
numerous  visuals in the form of film,
slides, drawings, animated diagrams
and specimens. (see Appendix 8.1 for
the script of programme 1).

**Logical
Build-up**

<u>Programme One</u> - "The Morphology of
Flowers" relates the specimen we see in
the laboratory to its natural habitat.
In this programme the students are given
an understanding of the function of a
flower, and then, by breaking it into
its components the programme analyses
the structure of the flower, clearly
labelling the parts.  The example taken
is Greater Bindweed (Calystegia secpium)
and moving in logically from the outside

**Importance of Labelling**

towards the centre the students see in detail, the Sepals, the Whorls, the Pedicel, Calyx, etc. Considerable care was taken to identify and label all the appropriate parts of this and other flowers used for comparisons.

**Annimation**

The second half of the programme explains the reasons for adopting a shorthand method of defining flower structure - Floral Formulae. Again, using the Greater Bindweed the programme builds an animated diagram of the Floral Formulae while analysing the flower. (The accompanying text can be found in Appendix 8.1.1)

Programme Two - "Fruits and Seeds" is produced in a similar style, and opens by investigating the reasons why fruits and seeds are produced. Pollination is explained and then the more subtle differences between fruits and seeds, ranging in size from the dandelion to the double coconut. A short feed back questionnaire incorporating diagrams accompanied each programme.

**Feedback Questionnaire**

## LAW

Three programmes entitled "Solicitor/ Client Relations" were produced. They incorporate a series of consultations between a solicitor and clients. The programmes are built on the skeleton of a fictitious case, and it is intended that the student should be afforded an opportunity to compare and contrast different styles of interviewing clients. Both the personalities, and approaches, of the solicitors and clients alike are extremely varied, although in each interview situation they have been furnished with exactly the same information and rehearsed to the same degree. The recorded interviews

**Left to Student Perceptions**

display a wide spectrum of social behaviour and mannerism between individuals. No attempt was made to suggest what are regarded as "good" or "bad" points. This is left entirely to the student and the tutors for discussion.

**Accompanying Text**

In addition to the video programmes, Notes for viewers were made available. These notes outline the aims and objectives of the programmes and give details on how they may be effectively used. (see Appendix 8.4) The accompanying questionnaire was intended to elicit a positive response and stimulate thought and discussion;to focus attention. Six interviews were recorded. Appendix 8.2.1 gives an example of the type of scenario used to provide a background for the 'actors'.

The work undertaken kept a production assistant fully occupied for six months, and took the time and effort of three academics over a longer period. While there is still a lot to be done, the work certainly expanded to fill the available time.

## EVALUATION

**Data Collection**

During the work the principal investigator, Dr McAleese, kept a diary and made notes on various aspects of the work. The media specialist also made a record of the work and filed documents and papers. On completion of the work,the principal investigator interviewed all the central members of the project. Out of a large number, he chose those who were involved over the full length of the work. Each participant made an estimate of various costs and time

Critical
Self-
Evaluation

involved in the work. These data
serve as a basis for this report and
the evaluation of the project as a
whole; in particular the concept of
course team planning. The evaluation
itself (that is, this report) is a
useful exercise in critical self-
evaluation and in providing a frame-
work for others to discuss the issues
involved.

The next chapter looks in detail at
the concept of Team Planning.

## 4. Course Teams *

This chapter in the report will
consider the course planning element.
It will in turn indicate the origins
of team planning, examine inter-
personal relationships, and suggest
a model that might serve as a back-
ground for further work and evaluation.

**Rational
Planning**

One of the central tenents in systems
technology is the rational planning
of instruction. Often in this model
it is assumed that teachers are com-
pletely responsible for the planning
of new instruction; calling on outside
help and resources only when required.
The subject specialist is therefore
seen as being the centre of a team of
individuals; such as media personnel
(e.g. graphic designers, TV production
assistants), 'educational assistants'
(Engel,1974) and sometimes students.
Recent thinking and the example of the
Open University (in the UK) has prompted
many to consider that instruction can

**Team of
Equals**

only be planned by a definite team of
colleagues working as equals. (For a
description of the Open University
system see: Lewis,1971 a,b,c,; Stanton,
1978 inter alia). The work in this
report arose out of an attempt to
plan and produce a number of learning
packages using a team approach in the
Law Faculty and the Botany Department.
In his application to the Nuffield
Foundation, Dr McAleese stated this

**Project
Aims**

particular aims thus:

> 'The project aims are to produce
> and evaluate two parallel series
> of learning packages consisting
> of videocassettes, textual material

---

* Footnote:

An early version of this chapter was
presented to ETIC 79. (see Scobbie and
McAleese, 1979).

and self-assessment tests. The
packages will be produced as a
co-ordinated, four cornered pro-
ject team exercise (subject
specialist, educational specialist,
media specialist and student repres-
entative). The effectiveness of
the project team will also be
evaluated in a participation,
observation study'.

The application spelled out the
intention behind the course team and
an aim was set for the team.

'- - - as well as producing and
evaluating the learning packages,
we intend to evaluate the role of
the project team in producing such
material. The team will be co-
ordinated by a graduate Production
Assistant from the Television Service
who will be seconded to the project
for six months. Each team will consist
of four members who will be jointly
responsible for seeing the project
through. In each case a student
will be invited to join the team
as a full working member'.

(See Appendix 8.5 for the substance of
the application).

Critical
Evaluation

This section of the report examines
critically the assumptions underlying
team planning and gives evidence on
such planning from the project.

Team
Teaching

The idea of course teams comes from the
work of curriculum development teams
where the project is brought into being,
not through the work of one individual
but  through team effort. (see,for example,
Humble and Simons,1978) Team teaching in
its planning phase (see, for example,
Shaplin and Olds,1964) follows a similar

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tactic. However, some authors writing of course design seem to take little account of the processes of course planning (e.g. Dallas et al,1976).

Division of Labour

One of the reasons often mooted for team planning is that there is a division of labour and a resultant use of specialists. Division of labour means that teams can be composed of media, educational and subject specialists. Sometimes student members are co-opted or asked to join such teams. Often, however, students are reluctant conscripts or 'after thoughts'. The origins of such composite team work might be found in the changing role of the teacher in education:

Teacher's Changing Role

'One of the most exciting and important things that has happened to the concept of teaching in many years . . . has been the current departure from the image of the teacher as an isolated adult working in lonely professional solitude...' (Denemark, 1969).

Educational Specialists

This breaking down of the isolation of the teacher has led to the introduction of specialist helpers at different levels. Engel (1974) writing about medical education advocated the use of 'educational assistants' to augment the traditional medical illustrator and the medical subject specialist. Such specialists were seen by Engel as providing the 'head' to the planning body. Recently polytechnics, colleges of Further Education and central institutions, in Scotland, are using course teams to plan new courses. Or at least on paper they have structures and the organisation for such teams. The difference between public acclaim and private reality, are taken up below.

Polytechnic Use

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These changes have been caused largely
by the need to prepare courses in
great detail for bodies such as the
Council for National Academic Awards
and to a lesser extent as a result of
student pressure.  In one Scottish
central institution, the Director has
'requested' all course team chairmen
to co-opt a member of the Educational
Technology Service Unit to serve on
the course team.  In one large poly-
technic in England, all CNAA submissions
have to go through an educational re-
sources unit for comment before they
**Internal**     leave the institution.  In general,
**Validation**    the internal validation of university
courses has meant (despite the use of
external examiners) less public
scrutiny and less interest in the
involvement of educationalist or
systems technologists than in poly-
technics.

In the Open University, course teams
are set up to plan, write and edit
course units (see Lewis,1971 a,b,c,
for a description of course teams;
but see more recently Stanton,1978).
**O U Teams**    These Open University teams are
composed of subject specialists,
representatives from the broadcasters,
a member of the Open University's
Institute for Educational Technology
and from time to time, legal experts,
designers, printers and others. These
teams seem cumbersome and it is some-
times alleged that some of the members
take little or no part in the work.
While the Open University is a good
example of the use of systems technolo-
gists in the planning of teaching, it
**Doubt**    was interesting to note the critical
**About Teams**   valedectory remarks of the institution's
first Vice Chancellor about the need for
such 'help'.  Indeed, the whole concept

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*19*

System
Irritation

of the educational technologist was
very critically examined.  It may be
that such 'acclaim' is the result of
good work.  It has been claimed that
the success of innovative work in
higher eduction can be measured by
the degree to which it'irritates' the
host  (see McAleese,1979 for details
of this line of argument).

Intimacy

The problems do not only exist in well
known examples, as this repat will
indicate, but also in less ambitious
situations.  Indeed, some have argued
that a small team in teaching is better
than a large one.  The _intimacy_ of the
small team may be beneficial; curriculum
development by committee, while attract-
ive from a research development and
diffusion (RD & D) standpoint, is not
well suited to university course
planning.

Working
on Own

Logistics

There are a number of reasons for this.
First, despite the 'exciting and
important' changes that have taken
place in teaching, much of the planning
work for teaching is still undertaken
independently by the lecturer 'working
in lonely professional solitude'
(Denemark,1969).  Not only does the
lecturer perform in private, he plans his
courses in privacy as well.  Second,
curriculum development by committee is
difficult due to problems of getting a
committee together when people have full
timetables.

Timetable
Pressures

During the project evaluation a number
of people commented in detail on this
problem.  One participant commented:

> "There was always the problem
> that people involved in this
> type of project are _giving_ of
> their time and there's got to
> be really total commitment ..."

One wonders whether 'giving' is the
right sentiment.  Is it that this
work is seen to be in addition to
"normal" work?  One participant said
with some feeling

> "If one could . . . devote a month
> to doing nothing else but this,
> then there would be no problems
> at all"

**Labour
Intensive**

Time was an important factor and it
is likely that any developmental work
will be labour intensive.

As there is no norm that people work
in committees; the planning of individual
work programmes tends not to take into
account joint planning.

This project high-lights this logistic
problem.  One team member after the
project said:

> ".... and you never have a total
> commitment because people are
> always dashing off to one place
> and the next: getting people to-
> gether was one major problem"

**Interpersonal
Conflicts**

Third, it may be that highly successful
'elitist-researcher' or 'elitist-teacher
lecturer' (Halsey and Trow,1972) are not
good at co-operative activities. Certain-
ly, comments made by individuals who have
had to work in highly structured teams
indicate a wide range of inter-personal
conflicts at a professional as well as
a social level. (see, Forman and Richard-
son, 1978).  This point is developed as
it is an important aspect of the project.

Inter-Personal Relationships

As suggested in an earlier section,

inter-personal relationships are
brought into sharp focus when one
works in a course team. Clearly,
there is no expectation that
professionals (academics, media
specialists etc.) need always work
in total harmony. Indeed, it is
likely that subject academics are as
likely to express differences of
opinion as might their more 'artistic'
colleagues in media departments. A
number of such references occur in
the literature on course planning;
for example:

**Creative
Tension**

'Certain conflicts and crises occur
in most course development project;
they are part of the "creative
tension" of any collaborative art'
(Forman and Richardson, 1977)

The questions that we raise relate to
normal professional interaction where
one does not always agree with ones
colleagues. Where disagreement is a
product of different value judgments
and creative pressures. We are con-
cerned to ask whether there are any
lessons to be learned.

**Selection**

What selection criteria are
necessary for team members?
e.g. only volunteers. Are
there means of removing inter-
personal tensions? e.g. social
events.
To what extent do factors like
age, experience, position, sex,
contribute to inter-personal
friction?

**"Open-ness"**

We feel that there are lessons to be
learned. Indeed, there is one principal
lesson. It is best described using the
word "openness"; that is, where inter-
personnel tensions exist, the resultant

**No Hidden Assumptions**

effect is seen in poor cumminication. An open social setting is one where there are no hidden assumptions; where goals are dear; where participants can have "full and frank" discussions with no vested interests to protect. This may seem like a recipe for some form of earthly heaven; yet in real ways academics can learn to be open in this way with each other. A good example arising from this project is with agendas. Many project meetings were unproductive because of the lack of "explicit meeting assumptions" i.e. the agenda. An agenda is not a prescriptive approach, rather a setting down of the business. An open agenda is one where people feel free to raise issues; and where there is a mutual respect and inter-dependence.

**Open Agendas**

We do not want to over-emphasise such matters. We note it as it is in our judgment that it is an area of academic work that is under-estimated. It is often assumed that because academics and their specialist colleagues have a common institution, they have common work assumptions. Indeed, as we indicate below, this is not the case.

**Common Work Assumptions**

A Model that Describes Team Planning?

Models can either be general statements that pre-determine the inter-relationship of variables, or descriptions that help explain the inter-relationship of variables. We are using the term in the explicative sense here, not in the deterministic sense.

**Initial Model**

An initial model for the course team participant's roles may suggest a team

of four individuals or groups of
individuals with relatively equal
roles. (see Figure 1, on page 20 )
Taking each individual it is possible
to record an expected role definition.

**Team Leader?**

Subject Specialist: the traditional
role for the subject specialist is
that of 'team' leader. However, team
in this sense is a rather loose term
usually suggesting pairs of individuals.
Subject specialist + media specialist;
subject specialist + students; subject
specialist + educational specialist.
In this project it was not clear the
role the subject specialists were
expected to play. Clearly he was the
person requiring the teaching material,
but different individuals involvement
varied. It would seem that there are
a number of variables that determine
the nature of the role individuals
play.

**Role
Components**

1. Status - real (e.g. professor,
        demonstrator)
        - perceived (e.g. high, low)
2. Experience of team planning
3. Time available
4. Commitment to project (e.g. 'roped
    in'; 'started ball rolling')
5. Ease of social interaction

**Ecclectic
Work**

Media Specialist: the individual who is
responsible for the execution of audio-
visual material. Different situations
call for different personnel; in the
current situation the media specialist
was a Production Assistant in the
Television Service. Although the main
focus for the media specialist's work
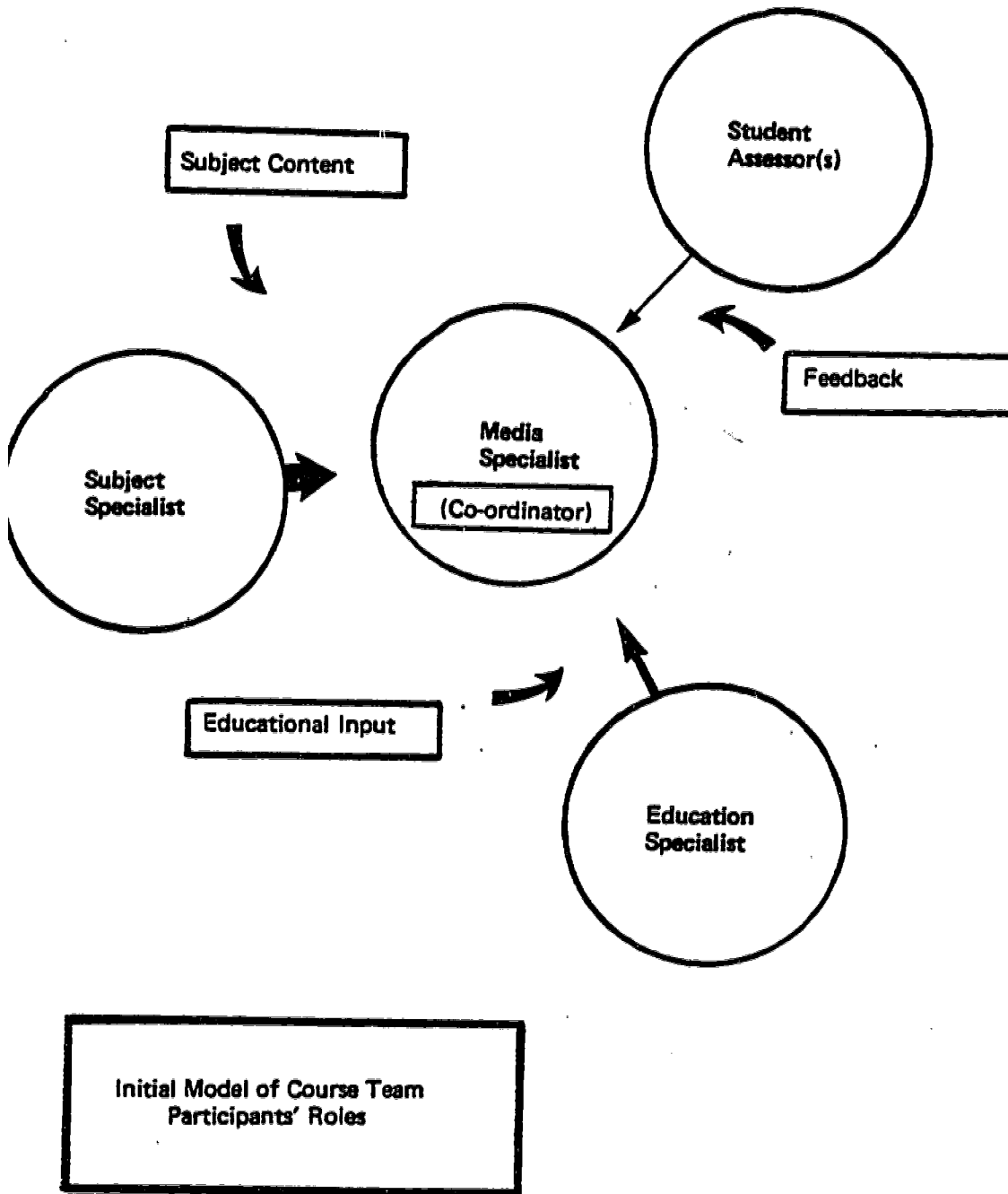is television, he should be able to
work with the range of media available

Figure 1

Service
Role

(film, still photography, etc.)
Usually the media specialist will
be the person responsible for getting
a script (for media productions) and
generally turning the ideas of the
subject specialist into a media or
finished format.  In general the
media specialist has a service role
to play.  In this project, the media
specialist was, to a large extent,
the team co-ordinator.

Not
Educational
Technologist

Poor Role
Definition

Educational Specialist: the individual
Engel (1974) called the 'educational
assistant'.  Someone trained in
psychology and/or education.  Not
usually an educational technologist
as this is a role played by the media
specialist.  Of the three main
participants the role of the educational
specialist is least well defined.
Indeed, part of this project has been
to see what role such an individual
can play.  Specifically the educational
specialist was the originator of the
project so his initial role was more
central than one might normally expect.

Consumer's
Conscience

Student Assessor: a student representative;
the consumer's representative. In practice
several types of students played this role
and as a result there is no clear role
definition.  The expectation was to have
one individual working with the team.

Tensions?

Course team planning causes tensions.
As we indicated earlier, all the partici-
pants have noted the presence of what
might be called creative tension (see
above).  Each participant in the project
saw this in different terms, yet in total
there is agreement.  Some comments high-
light this:

"There were temperaments involv-
ed ..... on occasions you will
find that people who organise
ideas into scripts and .... re-
cordings tend to be ... quite
quick tempered"

Nervous Energy    "You  .  ld say that there is a
lot of nervous energy around in
the production of television"

"It was always a pleasant atmos-
phere ... (but) in the beginning
there was a certain tension there,
and a certain aggression at various
stages".

These tensions can be analysed in terms
of 'role strain' (e.g. Goode,1960).
That is, due to differences between the
role that someone plays, or is seen to
play, and the role they are expected
to play or would like to play, social
and management tensions exist.  Role

Role Strain    strain in this project was due to
three contributing factors:-

| |
|---|
| - poor role <u>definition</u> for participants<br>- role <u>competition</u> between participants<br>- role <u>shift</u> in participants |

Causes

As a result the idealised model suggested
in Figure 1 needs modification. Figures
2 and 3 indicate  the relative positions
of the participants with regard to
definition, competition and shift. This
point is elaborated on further.

Different
Self
Perceptions    <u>Poor role definition</u>: due to the novelty
of the venture different individuals
perceived themselves in different ways.

Course Team Planning

Media
Specialist

Subject
Specialist

Student
Assessors

Educational
Specialist
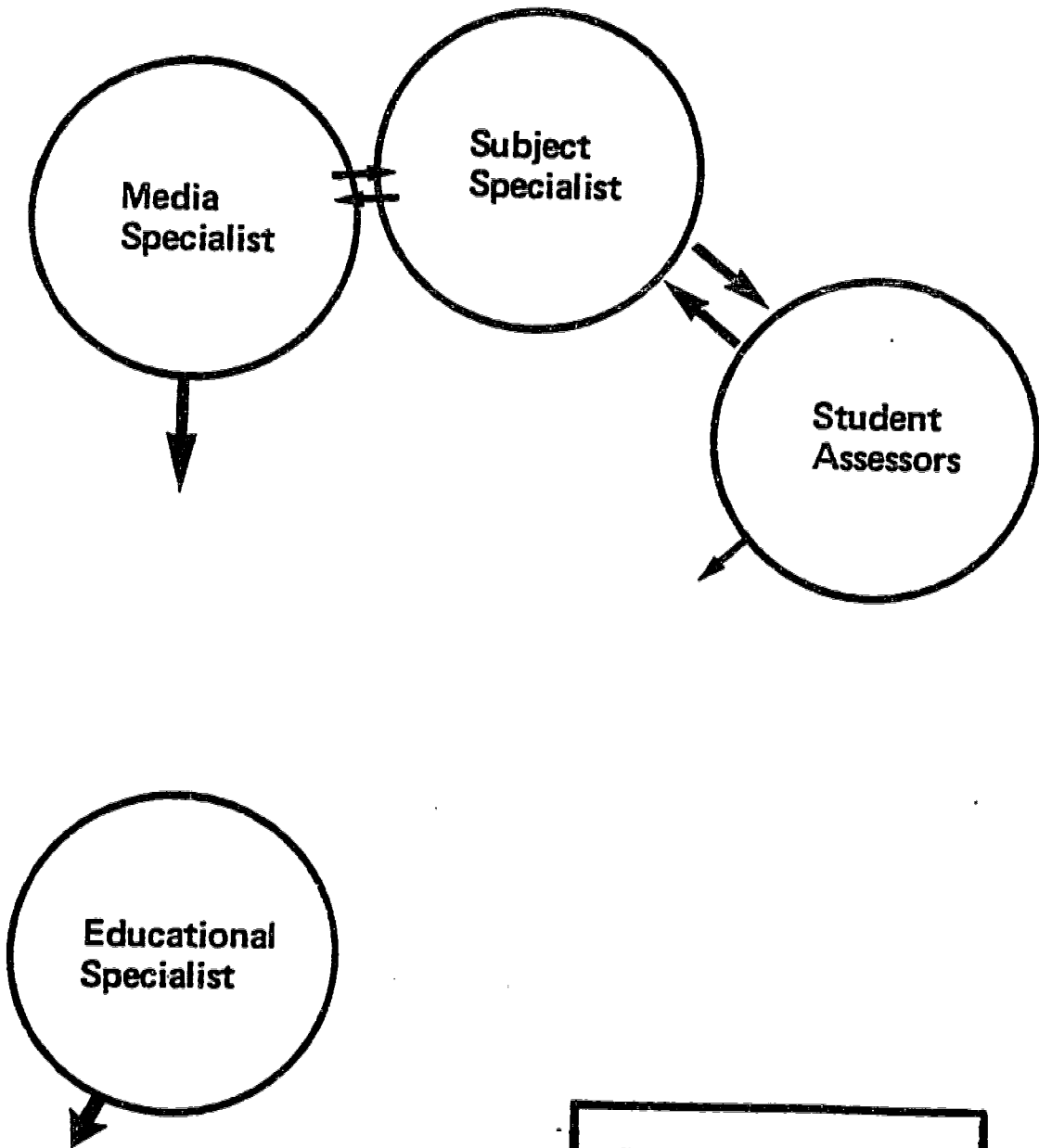
Relative Positions of
Participants with Regard
to Working Assumptions
and Team Operation

Figure 2

Course Team Planning
(Degree of Role Strain)

Subject Specialist

Media Specialist

Student Assessors

Educational Specialist

'A Great Deal'

'Quite A Lot'

'A Significant Amount'

'Very Little'
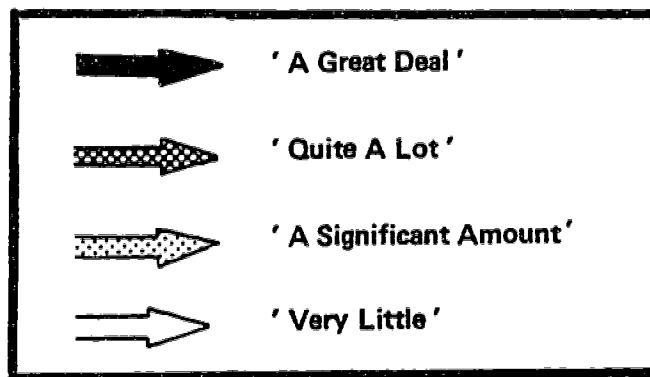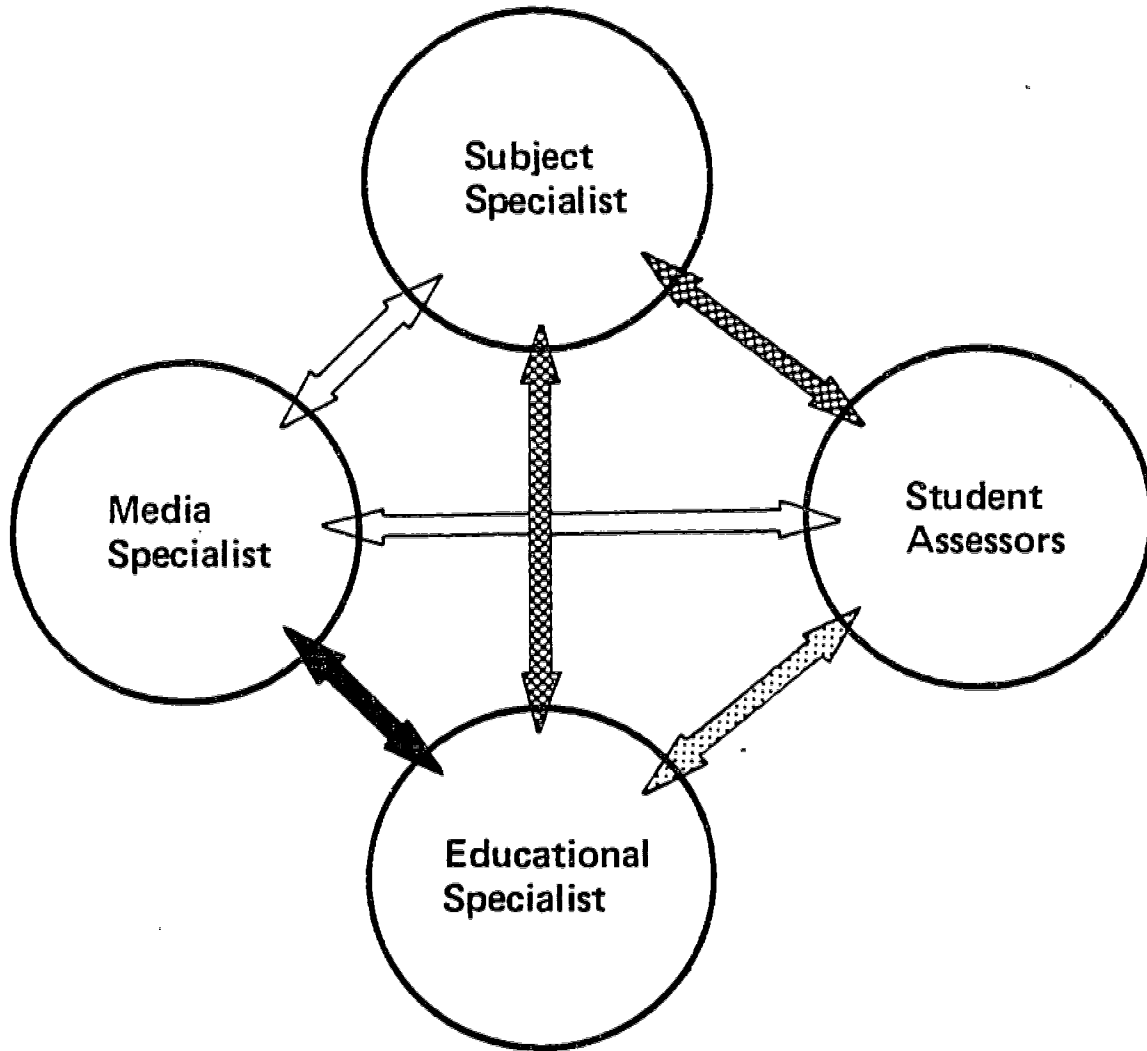
Figure 3

While the media specialist was the
'link man', he was perceived
differently by the subject special-
ist and the educational specialist.
No clear definition of what was
expected was made explicit at the
start of the work. The problem with
role definition can (in this instance)
be seen to vary from individual to
individual. (See the Table below).

| | INDIVIDUAL | PRECISION OF ROLE DEFINITION |
|---|---|---|
| **Role Definition** | Subject Specialist | Generally good |
| | Media Specialist | Not good, but improved over time |
| | Educational Specialist | Poor |
| | Student Assessor | Very poor |

**Project Direction**

Role competition: role competition
arises because of poor role definition.
Here different individuals expect to,
or are perceived as wanting to do
different things. In particular there
was strong role competition between the
educational specialist and the media
specialist with regard to overall
direction to the project.

**General Role Shift**

Role shift: is a result of competition.
Individuals who experience role strain
will shift their role definitions. This
can happen in two ways. First, individuals
can shift from marginal to central or
vice versa. A marginal role for an
individual defines him as having little
or no control of the direction of the
project. Role shift was found in all four
groups.

The role analysis suggests that the prime problem in such work is with role definition. This can be attended to in future work, but the further ingredients may well prove more important. This is, attention to

**Importance of Social Dynamics**

social interaction dynamics and the use of management skills in the overall direction of such work.(as noted above) Working structures do not simply emerge on a course team. It is not a serendipitous affair where 'good collegial relations - will magically result in a well designed product' (Forman and Richardson, 1977). Roles

**Initial Agreement**

must be defined and guide-lines agreed explicitly at the beginning. There has to be an individual with benign control. There has to be a plan that details objectives, team organisation and participant roles. And this document should be agreed to and 'negotiated' at the beginning. Forman and Richardson (1977) make the point well in their analysis when they say:

"After some months of egalitarian rhetoric and unendurable chaos we moved from the Jeffersonian school of course development - consensus

**Benign Despot Model?**

and democratic procedures - to the benign despot model of development".

Social dynamics awareness is an essential ingredient for successful planning. Individual members of teams must be sensitive to the aspirations, needs and feelings of others. When one works in a social setting, opening ones door (or at least leaving it ajar!) then petulence and a 'single-minded approach' are inappropriate. The person with most to lose (and gain) is the subject specialist. He must accept the corporate nature of planning and teaching.

Adaptive
Intervent-
ionist

Any project must have a coherent
view point that comes from the
subject specialist. He needs how-
ever, to allow other members refine,
shape the project and give them job
satisfaction. The educational
specialist must know when to inter-
vene, when to withdraw. He is or
should be what McAleese (1978) calls
the 'adaptive interventionist'. The
media specialist must be able to
facilitate, cajole, counsel the subject
specialist and the media specialist.
He should be the catalyst in this group.
The students need to see a product
that is relevant and to feel that their
contribution is pares inter pares.

If team members accept each others
commitment to their respective
disciplines, and agree on processes
and product there will be a useful
product.

The next chapter goes on to summarise
the evaluation of the packages.

## 5. Evaluation of the Packages

Type of
Evaluation

Various groups of individuals have been invited to comment on the packages. Members of the teams, students and external assessors. If we consider the reactions to be illuminative and agree with Stufflebeam (1968) that the purpose of evaluation is to improve not to prove, then our collected comments will improve subsequent packages.

In some ways we fell into the same traps that many other producers have done. In some programmes the information was too compressed, there was an attempt to exploit the medium to its limits as opposed to the needs of the student. One participant felt that there was a considerable gulf between the expectations of the media specialist and the subject specialist. Another said -

Production
Enthusiasm

"I think we got a bit carried away by the production enthusiasm .... in the light of the original depth of the programmes .... altogether there was too much production".

Professional
Exploitation

Now this is not necessarily a criticism of the television side of the work. It is a comment that high-lights the different professional views that exist; subject professionalism and media professionalism. One of the misconceptions that non-media people have is that the exploitation of media is not a professional activity. Indeed, it is only to be expected that media specialists will attempt to use all the tools of their trade, just as the academic subject teacher will do the same.

Subsequent packages will have less 'content' and more structured both in the television clips and the accompanying text materials.

The Law programmes will reach a wider audience than the Botany programmes and, therefore, they represent a good return on investment. It is likely that they will be used not only in Aberdeen but on a national Diploma in Legal Practice. The Botany programmes may not reach such a wide audience yet they may prove influential on both first year university teaching and school study of Biology.

If one were left with nothing more than the artefacts of the project, then one would certainly be a little satisfied.

Detailed
Evaluation

The most detailed evaluation carried out was with the Botany Programmes. Appendix 8.3 is the detailed report on one of the programmes.

Stimulate
Self Aware-
ness

Despite the length of the project, the Law programmes have not been used in a sufficiently wide setting to merit comment. Initial trials with students this year suggest that the programmes stimulate self awareness and pose questions of style and approach to professional work (not provided in any other way). The new Diploma in Legal Practice will be a fuller trial ground for these programmes.

We turn now to the final aspect of this report, costs.

## 6. Costs

We have attempted in this project to make an estimate of the costs related to production and planning.

**Why Costs**

We felt that as well as evaluating the process and the product we should indicate the relative nature of direct and indirect costs.

To begin with, one must ask why we should be concerned with costs? We are not attempting to establish the 'cheapness' of audiovisual packages; neither are we attempting to sell the concept as being more cost effective ... we have not attempted to make "hard" evaluations. Rather we are undertaking a further form of system analysis like that of examining the course teams. In systems analysis we are undertaking a process which Fisher (1971) describes as:

**Systems Analysis**

".........inquiry to assist decision makers in choosing preferred future courses of action by (1) systematic-ally examining and re-examining the relevant objectives and alternative policies for achieving them; (2) comparing quantitatively where possible the economic costs effective-ness (benefits) and risk of the alternatives"

Literature is not helpful in saying how to do it or what to do. Doughty et al (1978) reviewing the literature observe:

**Evidence of Cost-Effect-iveness?**

"While much of this current literature is a valuable contribution to the state of the art, it falls short of providing evidence on the cost effect-iveness of instructional technology"

**Direct
Costs**

Almost by definition these costs are
approximate and represent the magnitude
of the costs as opposed to precise
incurred charges. Different elements
of the costs vary with regard to their
precision. Direct or above the line
costs are more precise than below the
line costs. In other words, it has been
easier to estimate costs where a transfer
of funds have taken place from within
the institution to an external agent.
Costs relating to salaries etc. are
below the line costs and must be under-
stood to be less precise for two reasons.
First, there is an element of estimation
in terms of the number of hours spent on
any one task. No one on the project
kept precise diaries of time spent
although we all recorded in some fashion
the time involved in activities.

**Below the
Line Costs**

**Labour
Intensive**

Table 1 on page 32 summarises the costs
of the project work. It should be com-
pared in detail with the application
estimates. There is a considerable
similarity in the total budget costs.
As might be expected, the work was labour
intensive. Staff costs representing be-
tween 77% and 86% of total costs. This
figure highlights the human investment
in any educational process. The Botany
programmes were more expensive as a unit
basis with the higher input of specialist
time (More graphics, etc.) The Law pro-
grammes were slightly more expensive to
'stage' due to their simulated settings.

**Small
Investment?**

If one disregards the staff costs and
takes the above and below the line costs
for the programmes then the average of
some £275/programme represents a relatively
small investment.

We would be unwise to conclude that such
work is not expensive if staff time is
disregarded. This is not an unreasonable
assumption as staff costs can be written
off as fixed costs.

| gramme(s) | Materials | | Sub-Total | Staff | Total |
|---|---|---|---|---|---|
| | Direct | Indirect | | | |
| tany 1 | 280 (12.5%) | 41 (1.5) | 321 (14.0) | 1,915 (86.0%) | 2,235 (100%) |
| tany 2 | 123 (7.0%) | 62 (4.0%) | 185 (11.0%) | 1,469 (89.0%) | 1,654 (100%) |
| v 1/2/3 | 500 (13.0%) | 365 (9.6%) | 865 (22.0%) | 2,953 (77.4%) | 3,818 (100%) |

in £   (at 1979 costs)

Table 1 :   Television Programme Costs

(c f Cost of Packages in Appendix 8.5)

37

Expensive
with Capital
Depreciation

The other item which is ommitted relates to the capital investment in equipment and facilities. The question that one has to consider is "What elements should be included?" No straight addition of average costs over several headings will mean very much. Media based learning packages are expensive if one includes capital depreciation. They are less expensive with capital written off. It all depends on costing assumptions. Cost effectiveness is precise with regard to costing if one can agree on the elements of the equation.

## 7. Conclusion

When a stone is thrown into a pool,
it creates ripples; so any innovation
will have its effects.

This project has caused a number of
ripples in the status quo of planning
and production of media packages. It
is likely that some will dissipate;
others will have far reaching effects.
At the end of the day, it is attitudes
that may be slowest to change. Evidence
presented in a rational imperical way
will not necessarily make changes; it
may, however, inform opinion and provoke
the critical examination of teaching and
learning.

Changes in
 Attitudes
 most Difficult

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APPENDICES

## 8.1  BOTANY :  Television Script (example)

UNIVERSITY TELEVISION
ABERDEEN

Project No: VTP78C/

Rec.Date  : Tuesday,26th
            Sept. 1978.

Location  :

Botany Department Greenhouse
King's College, Aberdeen.

COLOUR

(C) 1978

### "The Morphology of Flowering Plants"

Director ................... John Scobbie

Engineering Manager ........ Don Terry

V.T.R. Engineer ............ Jim Woodward-Nutt

Sound Supervisor ........... T.B.A.

Lighting Supervisor ........ Jim Woodward-Nutt

Floor Manager .............. John Macpherson

Vision Mixer ............... Jean Christison

Camera 1 ................... Graham Nicol

Camera 2 ................... Evelyn Patterson

Camera 3 ................... John Macpherson

Caption Operator ........... Richard Hobbs

Caption Operator ........... Deirdre Chalmers

Designer ..................... Victor Davidson

Presenter .................... Professor C Gimingham


SCHEDULE

Monday 25th September 1978
Rendezvous T.V. Service Regent Walk

Check Equipment ............. 09.00 - 11.00

Travel to Botany Department ..11.00 - 13.00

Lunch ....................... 13.00 - 14.00

Rig and test equipment ...... 14.00 - 17.00

Wrap ........................ 17.00


Tuesday 26th September 1978

Technical Line Up ........... 09.00 - 10.30

Coffee ...................... 10.30 - 11.00

Rehearse/Record ............. 11.00 - 13.00

Lunch ....................... 13.00 - 14.00

Rehearse/Record ............. 14.00 - 17.00

Wrap ........................ 17.00


Wednesday 27th September 1978

De-Rig and return to base ... 09.00 - 13.00

Lunch ....................... 13.00

## 8.1.1  Botany Self Assessment Exercise

### SELF  ASSESSMENT  EXERCISE

1.  In the section of an idealised flower,
    (Figure 1), complete the names of the
    individual parts and the collective
    names given to the four whorls labelled
    A. to D.



|  | Individual Name | Collective Name |
|---|---|---|
| A. | | A. |
| B. | | B. |
| C. | | C. |
| D. | | D. |
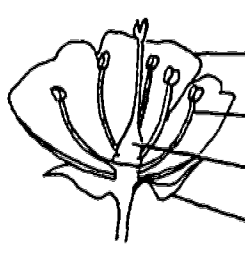
**Figure 1**

2.  What is the function of the whorl labelled D?

    _____

    _____

3.  What is the function of the whorl labelled A?

    _____

    _____

4.  In Figure 2 (part C in Figure 1), name the
    three parts indicated



    1. _____

    2. _____

    3. _____
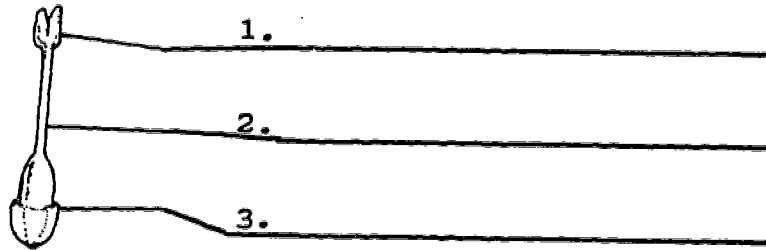
    Figure 2

5.



    a) Write down one word which
       describes the position of
       the ovary with respect to
       the other floral parts in
       Figure 3.

       _____
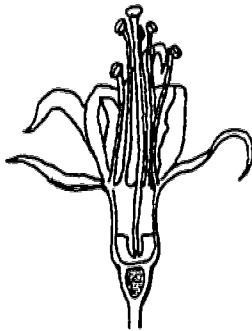
    b) This flower is described as

       _____

    Figure 3

       _____

6.  Is the flower in Figure 4
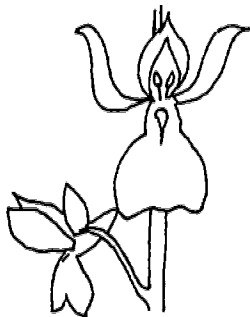


    a) Actinomorphic

    b) Zygomorphic                    (please tick)

7. The Foxglove (Digitalis purpurea) has only one plane of symmetry. The calyx is usually five lobbed, there are five petals fused into a tube, and four stamens. The ovary is two celled, and the flower is hypogynous. From the above description, complete the floral formula of Foxglove.

K          C          A          G

8. Caltha palustris or Marsh Marigold has an actinomorphic hypogynous flower where it is not possible to distinguish between the calyx and corolla. The combined outer whorls comprise five segments, there are at least fifty stamens and the ovary consists of five carpels. Write the floral formula.

## 8.2  LAW : Television Script (example)

UNIVERSITY TELEVISION
ABERDEEN

Project No: CTP79C/020-024

Rec.Dates : Monday,29th
January to
Tuesday, 6th
February 1979.

King's College Library and
Elphinstone Side Rooms.

COLOUR

(C) 1979

### SOLICITOR/CLIENT RELATIONS

Producer .................... Rob Hunter

Director ................... John Scobbie

Engineering Manager ........ Don Terry

Lighting Supervisor ........ John Kilpatrick

Sound Supervisor ........... Terry Farquharson

Sound Assistant ............ T.B.A.

V.T.R. Engineer ............ Dave Percy

Camera 1 ................... Graham Nicol

Camera 2 ................... Duncan Richmond

Camera 3 ................... Fiona Henderson

Camera Assistants .......... 3 Law Students T.B.A.

Floor Manager ............. Rob Hunter

Assistant Floor Manager .... Law Student T.B.A.

Designer ................... Ian Cargill

Stills Photography ......... Terry Farquharson


N.B.: General Assistance - Law students will
      make themselves available between
      lectures and tutorials. They will
      liase through Mr Rob Hunter.


SCHEDULE - VTP79C/020-022

Monday 29th January 1979

Rendezvous T.V. Service.  Derig studio and

load all equipment. Check list - Don Terry.E.M.

* Graphics Dress set ......  09.00* - 11.30

Proceed to location - King's College Library.

Two rooms adjoining as per floor plan.

Rig ........................  11.30 - 13.00

Lunch ......................  13.00 - 14.00

Rig, Set & Light.

Technical Line-up .........  14.00 - 16.45

Secure for the night .......  16.45 - 17.00

SCHEDULE

### Tuesday 30th January 1979

Rendezvous at location.

Technical Line-up .......... 09.00 - 10.00

Rehearse/Record ............ 10.00 - 13.30

Lunch (N.B. Late lunch) .... 13.30 - 14.30

Technical Line-up ......... 14.30 - 15.00

Rehearse/Record ........... 15.00 - 16.45

Secure for the night ....... 16.45 - 17.00


CAST: Solicitor - Vivian Ogston

     Employer  - Roddy Begg

     Secretary - T.B.A.

     Extras    - 1.

              2.

              3.

SCHEDULE

### Wednesday 31st January 1979

Rendezvous at location.

Technical Line-up .......... 09.00 - 10.45

Rehearse ................... 10.45 - 12.00

Lunch (N.B. Early lunch) ... 12.00 - 13.00

Technical Line-up .......... 13.00 - 13.30

Rehearse/Record ............ 13.30 - 16.45

Secure for the night ....... 16.45 - 17.00

CAST: Solicitor - Joyce Simpson

Employer - Bill Kirton

Secretary - Law Students

Extras 1. - " " "

2. - " " "

3. - " " "


SCHEDULE

Thursday 1st February 1979

Rendezvous Location &
 Technical Line-up ......... 09.00 - 10.15

Rehearse/Record ............ 10.15 - 13.00

Lunch ...................... 13.00 - 14.00

Check all recordings ....... 14.00 - 16.45

Secure for the night ....... 16.45 - 17.00


CAST: Solicitor - Joyce Simpson

Employer - Roddy Begg

Secretary - Law Students

Extras 1. - " " "

2. - " " "

3. - " " "

<u>SCHEDULE</u>

### <u>Friday 2nd February 1979</u>

Rendezvous location.Derig ...09.00 - 13.00
(Cameras to be kept on for Monday's Production)

Lunch ...................... 13.00 - 14.00

Design/Graphics - return Miss
 MacKenna's room to original
 condition ................. 14.00 - 16.45

Secure for weekend ........ 16.45 - 17.00

<u>SCHEDULE</u> - <u>VTP79C/023 & 024</u>

### <u>Sunday 4th February 1979</u>

John Scobbie & Ian Cargill Rendezvous at
Elphinstone Side Rooms.

Arrange and Dress Set ...... 14.00

<u>SCHEDULE</u>

### <u>Monday 5th February 1979</u>

Rendezvous at location 1.(King's College library)

Derig cameras and Rerig at location 2.
 (Elphinstone side rooms)Set and
 light location ............ 09.00 - 09.45

Technical line-up .......... 09.45 - 10.45

Rehearse/Record ............ 10.45 - 13.00

Lunch ...................... 13.00 - 14.00

Rehearse/Record ............ 14.00 - 16.45

Secure for the night ....... 16.45 - 17.00

CAST: Solicitor - Professor M Meston

Female applicant- Sylvia Robinson

   Secretary -

   Extras 1. -

      2. -

      3. -

## SCHEDULE

### Tuesday 6th February 1979

Rendezvous location 2. Elphinstone Rooms.

Technical Line-up .......... 09.00 - 10.00

Rehearse/Record ............ 10.00 - 13.00

Lunch ...................... 13.00 - 14.00

Rehearse/Record ............ 14.00 - 16.45

Secure for the night ....... 16.45 - 17.00

CAST: Solicitor - Jim Blaikie

   Applicant - Joan Oldman

   Secretary -

   Extras 1. -

      2. -

      3. -

SCHEDULE

Wednesday 7th February 1979

Rendezvous at location.

Derig and Load Equipment for
  Zoology O.B. .............. 09.00

## SOLICITOR - CLIENT RELATIONS

V.T.R.   CLOCK ON CAM. 2

1.   CAM. 1

CAP. U.T.V. LOGO

Q GRAMS

2.   CAM 2.

CAP. Solicitor-Client
        Relations

CUT TO

3.   CAM 1.

CAP. Alternative Approaches
        Number One

FADE GRAMS

V.O. Contribution Tape

CUT TO

4.   CAM 2.

CAP.   Cartoon 1.          V.O. - On Tape

CUT TO                     Duration -

5. <u>CAM 1.</u>

   CAP. - Cartoon 2.

   CUT TO


6. <u>CAM 2.</u>

                                   FADE OUT AUDIO TAPE

   CAP. Cartoon 3.


7. <u>CAM 3.</u>

   B.C.U. Scottish Law Ledger

   Slow Zoom out to W.S.

   revealing entire office.


Q. <u>GENERAL BUSINESS</u> -    THE SECRETARY IS BUSY TYPING
   AT HER DESK.  THREE CLIENTS
   ARE SEATED. ONE IS READING A
   NEWSPAPER, ANOTHER IS A WOMAN
   READING A MAGAZINE OR KNITTING.
   THEY HAVE OBVIOUSLY BEEN WAITING
   FOR SOME TIME. THE THIRD PERSON
   IS PETER FORGAN. HE LOOKS RATHER
   IMPATIENT AND GLANCES AT HIS
   WATCH SEVERAL TIMES.
   THE PHONE RINGS. THE SECRETARY
   ANSWERS.

SECRETARY:

Yes, yes ..... I'll send him
through right away.

SHE PUTS DOWN THE RECEIVER AND
ADDRESSES PETER FORGAN.

Mr Forgan .... sorry to keep
you waiting .....

PETER FORGAN LOOKS UP RATHER
MENACINGLY.

Would you like to go through
now please.

SHE INDICATES TO THE DOOR AND
PETER FORGAN WALKS TO CAMERA 3.

FAST FADE TO BLACK.

FLOOR MANAGER QUICKLY
REPOSITION HIM TO SET
2 AND HE PROCEEDS BRISKLY
FAST FADE UP ON

8.  CAM 2

M.C.S. Solicitor & Desk
PETER FORGAN ENTERS SHOT
THE SOLICITOR RISES TO
GREET HIM AND WE CUT AS
HE SITS.
CUT TO

9.  CAM 1.

O/S 2 SHOT, Solicitor &
    Peter Forgan.

AN IMPROVISED INTERVIEW COMMENCES WE SHALL

CUT BETWEEN CAM 1. and CAM 2, AS DIRECTED.

FLOOR MANAGER WIND UP AFTER 10-MINS. APPROX.

FADE TO BLACK.

FADE UP

10.  CAM 3.

CAP. U.T.V. END LOGO

FADE TO BLACK.

STOP TAPE.

## 8.2.1. Scenario for Law Programmes (example)

This scenario was used by the actors to give the character sketches of the participants.

### Outline of Characters

**Mrs Jean MacDonald**
**(Claimant)**

Aged c.35. Maiden name Forrest. Brought up in Edinburgh. After leaving school with 4 Highers and 2 Lowers, worked in father's iron-monger's shop. Did accounts and general book-keeping, undertook some of the ordering as well as occasional serving at counter. Attended night school to obtain secretarial qualification (Anderson's College Edinburgh). Married Sandy MacDonald, then a P.E. teacher at Tynecastle Secondary School in Edinburgh. (He was a product of Jordanhill Teacher Training College, Glasgow). No children. Not long after marriage, he moved to take up promoted post as head of Outdoor Activities at Ellon Academy. Not very long after move, he was seriously injured in a

mountaineering accident in the

Cairngorms, and is now a paraplegic,

having lost the use of both legs. He

can get about the house now, and

although for some time after the

accident he was very depressed he

has recently taken an interest in

activities for the disabled in the

Ellon area. His injury forced Mrs

MacDonald to go out to work. She

took a job as a clerkess with O'Donnell's

haulage firm, and remained after it

merged with Forgan's firm to become

(as it now is) O'Donnell and Forgan.

She does not earn very much - around

£45 per week - and finds that even with

her husband's disablement pension it is

difficult to make ends meet. The

couple live in rented accommodation -

taken originally as a temporary

expedient on arrival in Ellon so that

they could look around for a permanent

home, but Sandy MacDonald's accident

occurred before they had bought a place

of their own. The landlord is

threatening to evict them because

Mrs MacDonald has recently found

difficulty in paying the rent on

time.

O'Donnell & Forgan
(Respondents)

The firm is the product of a shrewd

amalgamation between two haulage

firms.  O'Donnell's was an old

established family business, started

by the present owner's grandfather.

Mr Sam O'Donnell, the present owner,

grew up with the business and has an

intimate knowledge of 'the trade.  He

has generally made the right decisions,

expanding the business both locally and

nationally.  Sam O'Donnell is well

immersed in the North-East business world,

and is generally rather conservative,

but open to suggestion.  He has adapted

to modern business methods and realises

the benefit of efficiency in management

and staff relations.  Before the merger

with Forgan, O'Donnell had built up a

special interest in long distance

haulage and fish refrigerated transport,

and this has since continued to expand.

His conservatism shows itself in his
attitude to women, which is morally
proper in sexual matters, but somewhat
authoritarian.  In his view women in
business have  a subordinate place.

O'Donnell has recently begun to leave
more of the management of the business
to his much younger partner John Forgan,
with whom he has a good working-relation-
ship.  He has a considerable admiration
for Forgan's modern and go-ahead methods,
and accepts that he has grasped the
opportunities presented to him.  The
merger has been a success and has brought
benefits to both O'Donnell and Forgan.

O'Donnell respected Mrs MacDonald's
competence as a clerkess in the office,
but did not wish to have has in a
managerial position.  He resents the
fact that she is contesting the decision
made by the partners (he rather than
Forgan had the determining voice in this
matter) to appoint Peter Sloman, a
distant relation of his own, to the post
of office manager.  He also resents any

suggestion that women should have
equal pay with men, or that anyone
should dictate to him how much the
firm should pay its employees.
_Forgan_ is much younger than O'Donnell,
about 38. He inherited his side of
the business from his father-in-law,
and is not a native of the north east.
Since taking over after the death of
his father-in-law he has expanded the
local haulage business, specialising
in the transport of live animals. The
market garden side of his father-in-
law's business he put in the hands of
a manager, and concentrated himself on
haulage, of which he had some personal
experience as an HGV driver. He was
successful before the merger, and was
able to negotiate good terms with
O'Donnell, whom he respects. He got on
well with Mrs MacDonald as long as she
kept what he considered her place. He
didn't want Sloman in the office manager's
job, but wanted the post readvertised;
however he did not want to have a dispute
with O'Donnell on the point. He is rather

angry with Mrs MacDonald for

complaining about not getting the job

and about getting less pay than Sloman

when he was working as a clerk in the

office.

Peter Sloman

Age about 26.  After dropping out of

university after 2 years - he had read

politics and international relations -

he took a job in a local ship chandlers

firm, - Corbett & Hunter. Unfortunately

he was dismissed for bad timekeeping.

After a period of 3 months on the buroo

he took a job with Santa Fe Contractors

as a roustabout on an oilrig - but

finding this arduous work he opted for

the easier life of a wages clerk.  He

had also found it difficult, working 2

weeks on and two weeks off the rig, to

maintain his relationship with Carol

Bruce.  He is paid by O'Donnell and

Forgan about £4,000 with the use of a

company car, while working as a clerk,

and of course this is increased when he

works as office manager.

Janet Buchan

A lady of about 36 with 3 young children

aged 5, 7 and 10. She is O'Donnell's

secretary, and is efficient, friendly
and well liked in the office. She
has 110 shorthand and 60 typing. She
had thought of applying for the office
manager's job, but did not as she does
not want more responsibility. She is
content with her hours and pay and Mr
O'Donnell is understanding about school
holidays.

Diane Simpson          17 years of age. Goes to day release
classes. Cannot work unsupervised.
More interested in boyfriends and
women's magazines than in work. Very
suggestible. She is the office junior -
types invoices and does copy-typing.

## 8.3  Sample Evaluation (Botany)

### Nuffield Project

1st Year Botany
TV Programmes "The Morphology of Flowering Plants"

> An Evaluation of Programme 1

### The Morphology of Flowers

In the second week of the first term 1979, Botany
1.1.1 students were shown programme 1 on Flowers.
This programme, presented by Professor Gimingham,
was the first of the Nuffield tapes made by John
Scobbie.  The programme lasted  15 minutes and was
accompanied by a Self-Assessment Test.  The test
comprised of questions intended to reinforce some
of the points in the programme.  In particular,
the concept of superior/inferior ovary and floral
formulae.  The Self-Assessment Test was drafted
by Mr Donald Patterson, the Research Officer in
the Botany Department.

The programme was shown on five occasions to the
students. Four times on Monday 15 October and once
on Wednesday 17 October.  On Monday groups of
students were taken from B21/23 (Zoology) to an

adjacent room to view the tape on a single
monitor. The tape was played from the TV Service
on the RF distribution system. A 'U Matic' copy
of the tape master was played. In all 108 students
saw the programme on Monday. On Wednesday 70
students watched the programme in their laboratory
G1 (Zoology). Viewing conditions were good apart
from one faulty monitor on Wednesday. Each student
after viewing the programme, completed the Self-
Assessment Test. On average this took about ten
minutes. A few students took a little longer -
very few were finished in less than five minutes.
On completing the Self-Assessment Test, the students
completed a 14 item questionnaire designed to gauge
their reactions to the programme and questions on
their entry qualifications, age etc. 108 usable
questionnaires were returned on Monday and 70 on
Wednesday. This analysis is therefore on the result
of student questionnaires.

## Student Entry Characteristics

The majority of the students were males (55%); only
15 were mature (i.e. over 22 years of age) and five

came from educational systems other than the UK (Ethopia, Norway, Sweden, Indonesia and the USA). The vast majority of students had studied Biology to an advanced level, either GCE 'A' or SCE 'H' before entry (71%). Only ten students had not studied Biology although 12 had studied a form of Biology other than GCE or SCE (e.g. ONC Biology). 14 students had only studied Biology to an ordinary level.

## General Response

In general the programme was thought to be both interesting and useful. The programme was probably thought to be slightly more useful than interesting.

| | Very Useful | Useful | Of little use | Of no use at all |
|---|---|---|---|---|
| Useful-ness | 30.3 | 65.7 | 3.4 | 0.6 |
| Interest | 13.1 | 72.6 | 13.1 | 1.1 |
| | Very Interesting | Interest-ing | Limited Interest | Of no int-erest at all |

Table 1 : Usefulness and Interest of the Programme

Table 1 shows the slightly wider distribution of interest scores. The background characteristics of

students (age, sex, qualifications) had no effect
on their degree of satisfaction. Most students con-
sidered the programme to be about the right length,
although a significant number (20%) thought that it
was too short. (This point is elaborated on below).
With regard to the Best Feature, 12 groups of
features were coded. The three that received most
comment were 'The Diagrams in the Programme' (46
mentions); 'The Level of Explanation by the Pre-
senter' (41 mentions) and 'The Use of Captions'
(36 mentions). These three accounted for 69.5%
of the replies. A wider range of features were
identified as being 'the worst feature of the
programme'; 18 categories were identified. Of these
four accounted for 43.5% of the replies. Some 28%
of the replies identified no worst feature. 28
students identified the density of the content to
be a poor feature, 20 thought that the close up
shots were not sufficiently close for clear vision,
18 disliked the introductory and closing music and
11 were not specific, but did not like the general
TV production. Table 2 (overleaf) summaries the
responses to these questions. If one considers
those students who thought it to be Very Interesting

and Interesting, then they tend to pick the same good and bad features as the group as a whole. In other words, no matter whether you thought the programme good or bad, then the same Production and Content variables were identified. In general, male students had fewer complimentary or critical comments than female students. No other characteristic of the students effected their response to these questions.

| Best Feature | | Worst Feature | |
|---|---|---|---|
| Presentation | 6 | 2 | Boring Programme |
| Tells About Course | 2 | 20 | CU's Not Close Enough |
| Diagrams | 46 | 18 | Music |
| Examples Used | 6 | 1 | Too General |
| Captions | 36 | 5 | Sound Track |
| Production | 4 | 28 | Density of Information |
| Explanations | 41 | 3 | Length of Programme |
| Relevance to Practicals | 5 | 7 | Not Enough Examples |
| Floral Formulae | 3 | 4 | Section on Carpels |
| Better than Lectures | 2 | 3 | Production Mismatching |
| Directions | 8 | 11 | TV Production |
| The Use of Colour | 1 | 9 | Pace of Programme |
| | | 6 | Introduction |
| | | 1 | No Microscope Work |
| | | 2 | More Directions Needed |
| | | 1 | Programme Discourages Further Enquiry |
| | | 3 | Presenter |
| | | 3 | Replay Conditions |

Table 2 : Best and Worst Features of the Programme

Many thought that the content of the programme
could be presented in an alternative medium. Of the
four media suggested, Demonstrations (88) was first,
followed by Books (46), Lectures (23) and finally
Audiotape (8). The vast majority of the students
thought that the Self-Assessment Test was worthwhile
(83%) and only 5 students would not like to see
further programmes. In general then, the students
were very pleased.

## Specific Points

A number of points require clarification. First, it
is quite usual in this type of investigation to find
a general level of satisfaction. The questions
asked (apart from the open-ended ones) did not
encourage a wide variety of responses. However, the
open-ended questions did suggest that despite the
general satisfaction with the programme, the students
were being critical of the content and the methodology.
Production variables (e.g. Diagrams, Close ups) were
identified on 184 occasions. That is slightly more
than half of all the possible occasions (64%). Of

these 184 occasions slightly more than half (52%)
were Worst Features. Content Variables (Explanations)
were identified on 94 occasions, however, 71% of
these were Best Features. Indicating that Production
Variables were thought to be more in need of attention
than Content Variables.

The level to which the students studied Biology had
little influence on their response to the programme.
This may be less surprising than at first sight when
it is remembered that only 15 students have studied
Botany as a subject and further when one considers
the amount of Botany in the 'H' or 'A' level syllabus.

The most striking feature of the evaluation was that
many students thought the programme to be too short
(36). However if one combines this with the number
of occasions that students identified the Density
of Information, the Need for More Examples and the
Pace of the Programme (44 replies) as Poor Features,
then one can conclude that the programme (15 minutes)
is too short for the amount of material presented.
Indeed, students who thought the programme too short,
accounted for 43% of the replies to the worst feature

'Density'.

Although the videotape and the Self-Assessment
Exercise were part of a package, it has only been
possible to examine the tape in detail.  There are
good reasons why further tapes should be shown,
although some production decisions will need close
examination before further programmes are made.

## 8.4 Notes for Students (Law)

SOLICITOR-CLIENT RELATIONS

NOTES FOR VIEWERS

R.L.C. HUNTER, W.S.

FACULTY OF LAW, UNIVERSITY OF ABERDEEN.

OBJECTIVES

By the end of this programme you should be able to exercise rational and informed judgment concerning:

a)  the purposes of an interview between solicitor and client, from a solicitors' point of view

b)  the probable effect of certain kinds of environment on the client

c)  the probable effect of certain kinds of solicitor behaviour on the client.

SOLICITOR-CLIENT RELATIONS

A Self-Instructional Programme.

Notes for Viewers

This programme consists of a brief text, a set of videotape cassettes of fictional consultations between solicitors and clients, and a set of questions which you may put to yourself, or discuss with other viewers or your tutor, after viewing the cassettes.

The Object of the Programme

No attempt is made here to inculcate a set of "do's and don'ts" for the conduct of consultations. The personalities of individual solicitors and of the clients who seek their assistance, and the whole circumstances of each case are too varied for anything more than very general principles (some of which are indicated in the attached text) to be formulated. The object is reather to assist you to develop your sensitivity to the nuances of interaction with clients in the context of the professional interviews so that you may more quickly develop a

style which both accords with your own personality
and achieves the institutional purposes of the
consultation. This means that the videotapes do
not point strong contrasts between right and
wrong ways of proceeding. Each interview deliberately
contains what the oroducers believe are, in the
context at least of the relationship with the client
concerned, some errors. On the other hand, no inter-
viewer here acts throughout in ways which are in the
circumstances entirely inappropriate. For similar
reasons there are no answers given to the questions
appended hereto.

## How to use the programme

It is suggested that you start by reading the attached
textual introduction. This provides an outline of
the main institutional purposes of the consultation
so that there is at least some framework within (or,
if you like, contrary to which) you can exercise
your judgment. It may be helpful then, before viewing
the cassettes, to look through the suggested questions.
They are not intended to be exhaustive; you are
obviously free to raise other points. Then view the

cassettes. These can be taken in any order, as
the very brief introductory sequence has been
included in each one. In fact, it doesn't matter
much if you have only one cassette at your disposal,
or have time to view only one properly. Probably
you will find it best to run each cassette right
through on the first showing, later replaying
sequences that you want to look at more closely
in relation to some particular question. If you
are viewing the cassettes in the context of a
course along with other students (for example, the
Diploma in Legal Practice required by the Law So iety
of Scotland) you may find it appropriate to arrange
to see them as a group, and discuss the matters
arising with each other or with your tutor.

## The Institutional Purpose of a Consultation

A distinction may be drawn between the institutional
and the personal purposes of a consultation between
a solicitor and a client. The client may sometimes
be concerned mainly to seek expressions of support
from a person of social experience and standing in
a vendetta with a neighbour; the solicitor may be

principally concerned with making a living or (as

the cynic would put it) making money. But the

consultation as a recognised professional institution

has in a sense its own purposes, in that whatever

the principal goals of the participants may be, the

general pattern of behaviour is determined by certain

assumptions about why consultations take place at all.

The institutional purposes of a consultation may be

summarised as follows:

1. <u>To establish sound personal relations</u>

    A client naturally wishes to discover for himself

    (if he has not done so already) whether the

    solicitor is a capable, trustworthy and reasonably

    sympathetic person before he reveals sensitive

    information about his personal affairs or gives

    instructions for any action to be taken on his

    behalf. A solicitor needs to encourage the

    client's confidence, since otherwise information

    vital to the accuracy of the advice given or the

    action taken may not be forthcoming.

    As the professional person offering a service,

    it is for the solicitor to determine the course

of the interview, and conduct it in a manner
likely to inspire confidence in the client.
Any behaviour which betrays such feelings as
impatience, dislike, condescension, or lack
of interest must somehow be controlled in the
interests of the furtherance of the professional
relationship.

A matter which perhaps does not quite receive
the attention from solicitors that it deserves
is the effect of the office environment. Though
no hard evidence is yet available, commonsense
suggests that orderliness and reasonable concern
for the physical comfort and relaxation of the
client probably have a reassuring effect.


2.   To discover the nature of the problem

The client seeks a solicitor because he perceives
that he has a problem which he does not feel
confident of being able to handle alone, a problem
that is usually, though not necessarily,connected
with the law.  Sometimes - especially in non
litigious matters such as the purchase of land,
the creation of a trust, or the formation of a
company, it is not difficult to discover how the

client perceives the matter, for he already
has very definite ideas about it and has merely
come to instruct the solicitor to put a trans-
action into legal form. In such a case, the
solicitors task is to make sure that his client
has given adequate consideration to all possible
courses of action, and to raise questions where
appropriate, about the measures initially proposed.

In other cases, the solicitor needs to be more
active in discovering the nature of the problem,
which may not at first be fully apparent. It is
an obvious temptation for a lawyer merely to
redefine a lay persons problem in legal terms,
or to accede too readily to a client's definition
of it in legal terms, contrary to the best interests
of the client. If, for example, there is a dispute,
it is very easy to assume litigation is appropriate.

And there are other temptations, not peculiar to
lawyers as such but which they cannot escape. It
is very easy to allow unreasonable social attitudes
to affect one's perception of a client's problem in
an unprofessional manner. There are of course some
desirable attitudes - such as disapproval of

perverting the course of justice and against
oppressive and dishonest conduct - but since
lawyers almost control access to the machinery
of justice they have continually to be on guard
against allowing views not securely grounded in
rational and very widely accepted morality to
interfere with the professional relationship.

3.  To obtain relevant information

A client may not provide information either
because he does not wish to do so, perhaps because
he is not confident of the solicitor's ability or
because he fears an adverse reaction or because
it relates to matters which he does not quite admit
even to himself, or because he does not think it is
relevant or important.

The first requires of the solicitor attention to
the improvement of personal relations;  the second
requires either careful questioning or an attempt
to persuade the client at least tentatively to
perceive the problem in a different way. A person
with legal training will in many cases perceive

problems differently from most of his or her
clients.

This does not mean that the legal perception is
the only one - lawyers have to be careful not to
suggest that they despise the way clients see
things - it is rather that the lawyer exists
mainly to give legal advice and assistance and
a certain way of perceiving problems is consistent
with that profession.  The information obtained
from a client should, as soon as possible after
the end of the consultation, be worked up into
a draft precognition (a document called a "proof
of evidence" in England and Wales).  This document,
the proper preparation of which is of enormous
importance in the conduct of a proof, trial or
other hearing at which evidence of facts is
presented, is not dealt with in this programme.

(For information of this topic reference should
be made to Sir David Napley's book "The Technique
of Persuasion" - 2nd Ed. 1975 - at pp 15-17, or
to J.M. Lees' Handbook of Pleading - 2nd Ed.1920
at paras.159-63).  It should be borne in mind,

however, that even if litigation is not in prospect, some record of who the client is, where he or she can be contacted, and what information he or she has provided, should be made. How this is done - by taking notes during the consultation, or by recording the consultation on a dictaphone or by reliance on memory - must depend on all the circumstances. What is important is that the method of recording should not upset the client.

Information, in the context of legal affairs, may include copies of relevant documents and the names of witnesses. If mention has been made during a consultation of such matters, care should be taken to record any relevant names and addresses, and to identify the whereabouts of necessary documents or other material evidence.

4.  <u>To give advice or obtain instructions</u>

This is the primary purpose of the consultation. Almost all consultations involve the giving of at least tentative advice on some aspect of the matters

raised by the client, though in a complex case
a solicitor should not be afraid - here even
at the risk of reducing his standing temporarily
in the eyes of the client - of saying that the
matter requires further study.  Unless the matter
is very urgent, correct but not immediate advice
is better than erroneous but immediate advice.(In
a very urgent case, both are equally useless). But
when advice is given it should be clear and as
precise as possible.  The impression of vagueness
should be avoided, though in litigious matters a
client should never be advised that his case is
absolutely certain to succeed.

Where the solicitor considers it desirable in the
client's interests that he himself should do some-
thing, it is important that he should obtain clear
instructions, so that he and the client do not mis-
understand each other.


QUESTIONS

1.  Office environment

a)  Do you notice any difference in the office environ-
    ments shown?

b)  Is either office environment likely to have a better

or worse effect on the professional relation-
ship than the other?

2. The consultation

a) Are there any differences in the ways the solicitors
handle the beginning of consultation)  If so, are
they important?

b) Do any of the solicitors say or do anything which
seems to have, or might have, an adverse or
positively good effect on the establishment
of sound personal relationships?

c) Do any of the solicitors -
  fail to define any problem in a proper manner?
  do anything which helps to define any problem
   in an appropriate manner?

d) Do any of the solicitors -
  fail to use the time available appropriately
   in eliciting information?
  adopt an inappropriate or offensive line of
   questioning, or reveal attitudes which might
   tend to inhibit the flow of information?

e) Do any of the solicitors -
  give clearly wrong advice?
  fail to give any advice at all where it is

clearly desirable give vague advice?

f) Do any of the solicitors obviously intend to act without having taken clear instructions?

g) Do you think the solicitors for either or both parties should seek to negotiate a settlement of this dispute?  If so, what course of action should each take?

## 8.5 Application to Nuffield

Statement of the work to be carried out.
This should include a brief description
of the background to the project and should
make clear what you propose to do, why you
think it is worth doing, and how you intend
to do it. The statement should be limited
to pages 2-3 of the form. Exceptionally
further details and accompanying papers
may be included in an appendix.

### Resource Based Learning in Law and Botany - A Team Approach

AIMS: The project has two inter-related aims:

(a) the production of a series of learning
packages consisting of video cassettes
and accompanying text material (instructions,
self-assessment tests) that will be used for
independent study or in group teaching.

(b) an evaluation of the 'Project Team' as a
means of developing learning packages.

BACKGROUND: In recent years, a far reaching
innovation in higher education has been the
concept of resource based learning. Resource
based learning is the name given to general

teaching/learning techniques where less emphasis is placed on formal teaching (lectures, tutorials) and more is placed on independent study. Further, it is argued that learning is occasioned by the active participation of students and that teaching therefore should be more concerned with presenting opportunities than with supplying facts or answers. It would seem that one way of achieving this may be the use of resource-based learning packages.

LEARNING PACKAGES: the Television Service in the University of Aberdeen has been active in preparing audio-visual teaching material for several years. Recently, the emphasis has changed from programmes to packages; that is, video tapes and accompanying instructions, texts etc. for direct use by students or for use in groups with tutors. Recent experience with the Faculty of Law in producing a series of programmes in Industrial Tribunals has suggested that a more systematic attempt should be made at producing integrated learning packages, devised by a four-cornered project team, subject lecturer, Education lecturer, student representative and media

specialist. It is our intention to produce
two series of learning packages in Law and
Botany using a project team approach. Each
package will consist of one or two video-
cassettes, reading material presented in a loose
leaf format and a number of self assessment tests.
In Law, there is an acknowledged need for
instruction on the presentation of cases to
Industrial Tribunals. It is felt that students
studying techniques of advocacy must be actively
involved in learning about the subject and that
any package should create some degree of
experimental learning by posing questions and
asking students to work out their own solutions
to problems. Experience from four programmes
already made is encouraging. Students and outside
bodies have shown considerable interest in the
initial trials (e.g. The Law Society of Scotland,
The Employment Services Agency and local schools).
The situation in Botany is slightly different. The
first-year class in Botany is a large one, and
while a considerable proportion have done Higher
Botany at school, many have had little formal
instruction in Botany. Teaching at University

moves fairly fast over the elementary syllabus,
but it is very important that students have a
firm and accurate foundation. Nowhere is this
more important than in the practical classes,
where success later on depends on a thorough
assimilation of basic facts, ideas and techniques.
It is easy for a student to fall behind, either
because he has not succeeded with a particular
technique, or because he has failed to interpret
his material correctly, or simply because he has
missed an important practical class. This is
work which cannot effectively be made up by
reference to text books.

We intend to make three or four learning packages
to be used in conjunction with Botany practical
classes to solve some of these problems.

EVALUATION: the learning packages will be
evaluated using questionnaires, observation of
the students, and an examination of the production
decisions. We will also attempt a financial
evaluation.

The project teams will be evaluated in two
case studies. In these, the lecturer in
Education will carry out a participative
observation study of the roles of the team
members, their working relationships, the
dynamics of the team and how it operated.
Few attempts have been made to evaluate such
team planning, (outside the Open University),
and it is felt that this particular aspect of
the overall project will be of wide interest.

THE GRANT: money from the Nuffield Foundation
will be used to make a part payment (75%) of
the salary of the Project Co-ordinator (The
Television Service Production Assistant) and
payment for intermittent secretarial help.
Other costs of the project will be bourne by
the University. It is estimated that the subject
teachers will contribute the equivalent of two
days per week for the duration of the project;
the lecturer in Education, the equivalent of one
day a week; the Director of the Television Service,
one half day per week; the student members, not

more than onehalf day perweek; and the Project
co-ordinator, full-time. The project will last
for approximately six months. Work has already
begun and we hope to appoint the Production
Assistant from August 1978. An initial report
of the project should be ready in February,1979.

Support for the project from outside the University
has come from:
Law Departments in other Scottish universities;
local schools (both Law and Botany projects);
Botany Departments in several universities; and
so far as the Industrial Tribunals are concerned
other interested parties include the Law Society
of Scotland; the Employment Services Agency; The
Citizens Advice Bureau and the Workers Education
Association.

ADDITIONAL INFORMATION

BOTANY DEPARTMENT PROJECT

Background: The first year class in Botany in Scottish
Universities is usually a large one (230 in
Aberdeen), and while a considerable proportion

have done Higher Botany at school, many
have had little formal instruction in Botany.
Teaching at University moves fairly fast over
the elementary syllabus, but it is very
important that students have a firm and accurate
foundation.  Nowhere is this more important
than in the Practical classes, where success
later on depends on a thorough assimilation
of basic facts, ideas and techniques.  It is
easy for a student to fall behind, either because
he has not succeeded with a particular technique,
or because he has failed to interpret his
material correctly, or simply he has missed
an important practical class.  This is work
which cannot effectively be made up by reference
to text books.

The Proposal: A series of short video tapes would be pre-
pared to be used in two ways:-

1)  During a practical class, when a demonstrator
would take small groups of students (usually
6 - 12), into a side room.  The tapes would
place a valuable tool in the hands of the

demonstrator, when he feels that the students,
or some of them have not fully achieved the
objectives of the practical, or have not had
time to complete it, or require to revise parts
of it.

2) As resource material in the library, where the
tapes would be accompanied by notes, with
provision for self-assessment on the subject
covered.  The latter would often be in the
form of unlabelled diagrams for completion
by the student before checking back with the
tape.  This would enable students to fill out
their own practical records, and would offer
invaluable revision material at exam time.
(At present there is very little scope for
students to "revise" practical work effectively).

Subject
Matter: The tapes would identify aspects of the whole
year's practical syllabus, which seem to give
students the greatest difficulty. These include:-

a) The structure of the various organs of flowering
plants (i.e. morphology and anatomy of stems,
roots, leaves, structure and functions of the

parts of the flowers).

b)      The basic physiological experiments (here the
        student is frequently at a loss if his experiment
        fails to work - this is not always his fault.
        A demonstration of a successful experiment on
        tape would be most helpful).

c)      Morphology and reproductive structure of fungi.

d)      Basic features of the life cycles of repres-
        entatives of the main groups of the plant
        kingdom, with emphasis on evolution and
        adaptation.

        It is envisaged that short tapes on individual
        components of the above classes of topics,
        would be linked by tapes which provide
        comparisons (e.g. between stem and root
        structure, or between moss and fern life-
        cycles), which would invite further self
        assessment by the students.  Additional tapes
        would provide technical instructions, e.g. on
        setting up the microscope, on cutting, mounting
        and examining sections of plant structures.

Finally, opportunity would be taken whenever possible for the tapes to serve two additional functions, which are difficult to introduce into practical classes:-

a) to illustrate the plants concerned in their natural habitats and environment, thus emphasizing the adaptive role of the structural features to be demonstrated (so often students see their specimens only in isolation on the laboratory bench).

b) to emphasize the significance of experimental results or structural features in the growth and development of the plant as a whole (again, students often have difficulty in relating particular experiments etc. to the physiology of the whole plant).

NOTE: Post-graduate students in the Botany Department who act as Demonstrators to the first-year class, already have some experience of television work and are extremely keen to be involved in the above project. Indeed, they had identified the need for resource material on the lines

indicated above before the possibility of a
project of this nature had been mentioned.


LAW   PROJECT

Background:   Five law faculties of Scottish universities

have for many years been responsible for

providing through the LL.B. degree the whole

of the systematic education and training of

solicitors and advocates in Scotland. As well

as this solicitors and advocates undergo after

the completion of their university studies, a

period of apprenticeship or pupillage during

which they gain practical experience and re-

ceive some instruction.  This system is re-

cognised by both the universities and the pro-

fession to have defects.  Recently a change

in this system has been accepted by the Standing

Committee on Legal Education, which contains

representatives of the universities and the

professional bodies.  In order to provide both

a more satisfactory academic foundation in the

law degree and a more thorough training for

professional work, it has been agreed in principle

by the universities and the profession that a

Diploma in Legal Practice should be instituted by the universities as a supplement to the law degree, and that this Diploma be made a compulsory requirement for entry to the profession. Procedure, now taught in the degree, will become a compulsory course in the Diploma, and a new course in Advocacy will be established in the Diploma.

It is difficult to teach students how to conduct an interview with a client or how to examine a witness in court, without using recorded sequences or simulated interviews and witness examinations to illustrate the points being made. It is believed that the teaching of litigation procedure and advocacy may be improved by the introduction of instruction through videotape materials. Whether or not the Diploma is instituted - and at the time of writing this still hangs in the balance for financial reasons - some improvement in the effectiveness of teaching the professional techniques of interviewing and forensic pleading is required. For this reason we

have planned, a set of videotape programmes
which would be used initially in the context
of the law degree. The success of the project
would be monitored to assess the value of this
method of teaching these legal techniques.

The Proposal: A series of videotapes would be prepared to
be used in two ways:

1. As part of the formal course in Advocacy, on
the introduction of the Diploma, or as part
of one of the courses in the law degree. The
tapes would be used by the lecturer or tutor
concerned to provide systematic instruction
as part of the preliminaries to practical
exercises by the students themselves in the
preparation and presentation of a client's
case to a tribunal.

2. As resource material for student use in the
library, when the tapes would be accompanied
by notes and self-assessment questions. Such
self-instruction could extend only to the extent
of the intellectual assimilation of principles
and legal rules, not to the development of
expertise in interviewing and pleading.

The subject matter of the tapes presently proposed would

be the preparation and presentation of a case to an
industrial tribunal. This has been selected for the
project because the formal rules which govern tribunal
hearings are less complex, and the setting less
difficult to simulate, than those of the ordinary
courts. For legal reasons recording of actual inter-
views with clients and actual court and tribunal
hearings is impossible, therefore we are using simulated
hearings.

It is envisaged that, in a series of three programmes,
a case of unfair dismissal would be followed through
from the initial interview between solicitor and
applicant to the closing statements at the hearing.

Programme 1 would contain sequences recorded at a
   simulated interview, interspersed with commentary
   and discussions on interviewing techniques.

Programme 2 would contain commentary and discussion
   of procedural problems encountered between the
   interview and the hearing; and

Programme 3 would contain sequences recorded at a
   simulated hearing, interspersed with discussion
   and commentary on each aspect of pleading technique -
   the opening statement, examination in chief, cross-

examination, re-examination, and closing statement.

Each programme will be accompanied by notes for
tutors and a set of notes and self assessment
questions for the students.

Note:  The Council of the Law Society of Scotland are
aware of       proposed experiment, and if this method
is shown to be effective in the forensic training of
solicitors (whether in the proposed Diploma or in the
context of the present law degree) they will favour the
preparation of similar programmes on the presentation
of cases to other types of judicial and quasi-judicial
bodies.


## THE PROJECT TEAM

Each of the learning packages will be designed and
complemented by a project team.  A project team will
be set up for both the Law and the Botany packages.
Each team will consist of four members:

    a Co-ordinator (T.V. Service Production Assistant)

    the subject specialist (either Law or Botany)

    a student representative (nominated by the subject
      specialist)

    an education specialist (the applicant).

The project team co-ordinator and the education specialist

will work on **both** projects; the subject specialists
(Professor Gimingham and Mr Hunter) and the student
representatives will serve only on their own team.
The Director of the Television Service, Mr Alan
Grimley will assist either team when the need arises.

Each member of the team will have a specialist role
to play. The co-ordinator will, as well as seeing
the project through, provide his expertise in using
television. The subject specialist, i.e. the lecturer,
will ensure that his teaching aims are being achieved
and will be responsible for the 'content' of the packages.
The students' side of that of critic and representative
of the consumers. In the project team, the education
specialist (i.e. the applicant) will provide educational
assistance with, for example, the identification and
clarification of aims; learning strategies, self assess-
ment techniques and evaluation of the packages.

As well as taking part in the Project teams as a working
member, the applicant will evaluate the project team
approach. It is recognised that team planning is still
a new idea requiring careful scrutiny. The applicant
will undertake two participative observation studies
of the teams. In this he will observe and evaluate the
roles of the various team members, including himself;

their working relationships, the dynamics of the
teams, and so on. It is envisaged that the two
project team evaluations will complement each other
and will illuminate the nature of such planning.

COSTS

We are applying for £2,949 to cover the salary of a
production assistant and the salary of a part-time
secretary. Other costs are bourne by the university.
The grant from Nuffield will cover about 40% of the
development costs. (see attached Appendix).

The nature of the costs of educational developments
are particularly complex (see Fielden, 1978). The
range and magnitude of costs associated with any
project largely depend on the nature of the assumptions
behind the cost equations. Whether, for example, one
includes development costs, depreciation of capital
equipment charges and apportionment of overheads.
For example the 'true' development costs of the packages
for Botany and Law might be: Botany : £11.41/student
usage; Law: £17.15/student usage. (See the Appendix
for details of the cost/unit. In comparison the costs
of a conventional lecture would range from £4 to £25 (see
for example NDPCAL 1976).

The investment in this project must be seen to be
discounted over a number of years. We estimate that
both sets of packages will have a useful life of at
least three years (assuming of course, for the Law
packages, that there is no radical change in
legislation). The costs of the packages therefore
are in line with comparable costs of alternative
teaching techniques.

Such packages are inevitably expensive as is all
teaching when properly costed. However, against the
costs can be seen a number of advantages:

a.     at least an equivalent teaching method to
       conventional lectures or practicals. Many
       would claim packages to be inherently
       superior.

b.     a multiplier and seeding effect within the
       respective departments and faculties with
       respect to such teaching methods. It is
       expected that other teachers will use a
       similar technique if it is successful.

c.     the insight into course teams planning
       which in itself is transferable within
       the institution and externally.

The success of the packages will depend partly on

costing assumptions, but largely on whether they are of use to the learners and the teachers. Nevertheless, part of the applicant's report on the project will deal with the costs of the packages. On completion of the project, more accurate costs will be available. S⋅ h costing will be of general interest (see Harris, et al 1977).

TRANSFER

Transfer of production expertise will take place in two ways: first, by direct transfer within the institution; second, by the dissemination of reports and articles to the academic community as a whole. Within the institution, the production assistant will gain insight into such planning and this will have a multiplier effect with similar work in the future. Externally such knowledge will be disseminated in the usual way; reports, articles, etc.

OTHER PACKAGES

The likelihood of further packages is largely dependent on the success of this venture. Past experience would lead us to believe that if the subject specialists and

the students are 'satisfied' with the success of the

packages, at least one or two more packages will be

made.   The university TV Service are confident that

they will produce more such packages and are there-

fore releasing the production assistant to the project

to develop the planning techniques.

References

CVCP (1972)  Report of an Enquiry Into the Use of
    Academic Staff  Time, Committee of Vice
    Chancellors and Principals.

Fielden, J. (1978)  The Cost of Innovation and Change
    in Education, PLET 15,1,16-25

Harris, D. et al (1977)  Uses of and Student Reactions
    to Study Packs or Self Instructional Material in
    the Library  University of Bath Educational Services
    Unit   .

NDPCAL (1976)  The Cost of Conventional University
    Teaching, National Development Programme in Computer
    Assisted Learning, Technical Report 13

Robbins Report (1963) Appendix 3, Cmnd 2154, HMSO.

APPENDIX

## A. Costs of Packages

A. Staff Costs

| | | |
|---|---|---|
| Production Assistant* | £2,865 | |
| Secretary | 414 | |
| Academic Staff** | 4,320 | £7,599 |

B. Capital Equipment Charges    Not identifiable at this stage

C. Consumables*** (i.e. paper,tape etc.)    £ 100    £ 100
£7,699

A. By Project:

| Botany | | | Law |
|---|---|---|---|
| 3,658.00 £2,083.00 | | Subject Specialist | £1,575.00 |
| | 1,432.50 | Production Assist- ant | 1,432.50 |
| | 212.00 | Secretary | 212.00 |
| | 331.20 | Educational Specialist | 331.20 |
| | 50.00 | Etc. | 50.00 |
| | £4,108.70 | | £3,600.70 |

## B. Student Usage of Packages

Botany   120 students/annum   (360 for three years)
Law      70    "   /   "      (210 "     "     " )

## C. Costs/Unit

Botany: £4,108.7/for 360 student 'users' (£11.41)
Law    : £3,600.7/ " 210 "  "  "    (£17.15)

Notes    * Full cost of Production Assistant

** based on NDPCAL,1976,Robbins,1963 and CUCP, 1972 i.e. assuming that instead of preparing learning packages they could be preparing lectures

1 Professor (45 days) at £46.30/day
1 Senior Lecturer (45 days) at £35.00/day
1 Lecturer (22.5 days) at £29.44/day

*** Estimate.