ABSTRACT

Studies of Teaching and Learning in a Polytechnic.

Thomas Baum.

This study concerns the development of feedback mechanisms to enable teachers in higher education to obtain information about various aspects of their teaching and to facilitate more effective communication between teachers and students.

The initial stage was a large-scale survey of students and teachers in a Polytechnic, designed to identify and quantify a gap in the perceptions of teachers and students about the process in which they are jointly engaged. While a gap was discernable, the survey showed it to be different according to the course and subject involved.

Consequently, mechanisms were developed to enable teachers to obtain feedback on their own teaching situation; these draft ideas were contained in a booklet, "Communication about Communication", which was circulated to all staff in the institution. Case studies of the use of the schedules are described. Validation techniques for use by teachers on their own instruments were tested in conjunction with the main project and these are described.

One of the main problems facing a project of this nature relates to teacher attitudes and these were explored by means of a sample survey.

DECLARATION

Re: The dissertation entitled

STUDIES OF TEACHING AND LEARNING IN A POLYTECHNIC

I certify that the dissertation I am submitting for the degree of Master of Philosophy has not been accepted in substance for any degree and is not being concurrently submitted in canditure for any degree.

I also certify that I have not been a registered candidate for another award of the C.N.A.A. or of a university during the research programme.

Signed 

STUDIES OF TEACHING AND LEARNING
IN A POLYTECHNIC

WAYS OF IMPROVING LEARNING BY STIMULATING COMMUNICATION BETWEEN TEACHERS AND STUDENTS ABOUT THE EDUCATIONAL PROCESSES IN WHICH THEY ARE ENGAGED.

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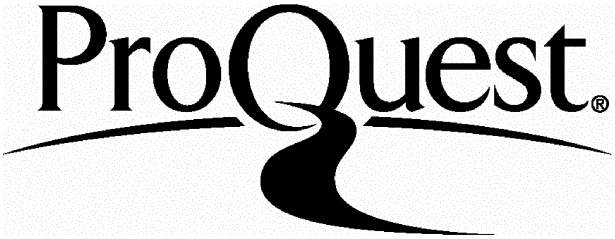

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INTRODUCTION

The central theme of this thesis focuses on two concepts, communication and accountability. At first glance, their association in the field of teaching in higher education may seem somewhat tenuous and, indeed, their consideration under the same umbrella is the result of investigation in an area which is influenced by conflicting, even contradictory, factors. Communication is undoubtedly the mainstay of this work. The crux tenet of this thesis is that communication about pedagogy between a teacher and his students is a crucial factor in the effectivenesss of the teaching-learning process in which they are jointly engaged. Where the teacher-student relationship is co-operative and is geared towards like objectives, this can only enhance the effectiveness of the student learning which accrues. Conversely, an association based on misunderstanding and deta chment must be to the detriment of the learning process. It is hoped that this thesis will go some way towards substantiating these assertions.

In terms of accountability in teaching, this thesis is an attempt to maintain the recognition for the need for more public scrutiny of teaching within the control of the teacher himself, not withstanding the need for credible practice, and thus to avoid some of the feared excesses which are suggested when the appraisal or evaluation of teaching is discussed. It is a significant feature of the contemporary situation in further and higher education that teachers are faced with increasing demands for accountability in relation to their professional activities. Economic stringencies coupled with a growing "consumer" consciousness among the student body is creating a situation in which the teacher may be required to justify his methods, course content, use of resources, strategies of assessment and general approach to teaching in a way that is largely alien to the traditional approach to teaching in this country. The teacher today is less able to maintain the "splendid isolation" within his classroom and, consequently, must be sensitive to all indicators, internal and external, regarding his teaching. One result of this has been the mushrooming of interest in various methods of obtaining feedback on a teacher's activities. Research and development work in the United States dates back to the early years of this century but in Britain it is a comparatively recent phenomenon. A review of the salient literature, contained in chapter 2, will give some indication of these developments. Communication

and accountability are linked in their association with feedback on teaching; the concern of many teachers is that feedback will operate as a means of appraising and controlling their performance. This has presented problems of conflict of interests in relation to this project where the hope was that feedback on teaching could act as a facilitator for improved communication between a teacher and his students.

These two central concepts had not been clearly evolved at the onset of the project. The starting point for the Teaching Analysis Project was the description on the basis of which the project was advertised. Entitled "Self-analysis schedules in higher education", it said:

> "The Polytechnic Teaching Analysis Project is to be a series of action research investigations into teaching and learning in the Polytechnic. This will entail the development, use and evaluation of a series of self-analysis tasks which could be used by Polytechnic teachers to monitor the learning experiences of their students".[1]

This initial statement placed emphasis on the development of materials and procedures for teachers to improve-monitor their students' learning. The form and orientation of these materials was not specified; this would depend upon the teaching- learning climate which was found in the institution. The emphasis of the project was on action research activities in the sense that each new direction was to be determined by value judgements made as a result of the previous activities. While a generalised series of objectives and a pragmatic rationale could be identified, these were amenable to alteration and were by no means based on pre-experimental hypotheses.

The first stage of the project involved a "field" testing exercise to determine the perceptions of teaching and learning held by students and their teachers in the Polytechnic. This survey is described in chapter 3. The initial conception of this exercise took the form of a fairly conventional survey exercise which, it was hoped, would produce some quantifiable indication of a disparity (or otherwise) of perception between staff and students.This approach , in essence, accepted what Parlett and Hamilton (1972)[2], among others, have described as the agricultural-botany paradigm for social and educational research and evaluation. This original attempt to identify a numerical "gap" proved abortive and led to a re-thinking of the purpose of the exercise.

Had the survey been designed solely to collect information according to pre-specified criteria, a major re-thinking process would have entailed redesign and further testing of instruments as well, possibly, as a repeat of a survey exercise. However, even at this stage, some concern was felt at the appropriateness of the traditional scientific paradigm for the collection of data for use in practical teaching situations. A fairly conventional survey format was originally adopted because it appeared to be the most appropraite approach and one that was "academicly respectable". It is only relatively recently that some social scientists have questioned the applicability of the scientific model to social and educational activity, such as the teaching environment, and the kind of data which is generated in sociological and educational situations. Bassey (1980)[3] surveys some of the arguments in relation to educational research methodologies,while in the sociological field, Busfield and Paddon (1977)[4], undertake an empassioned rejection of much of their own work on the family on methodological grounds. They argue the inappropriateness of the conventional survey method for dealing with social phenomena and extend this concern by concentrating on the academic climate which channelled them into a research design, probably inappropriate for the material being dealt with.

> "The conviction that a good sociological study means a survey and preferably a survey that incorporates the application of sophisticated statistical procedures originates from a particular view about scientific knowledge; a view that is not only positivistic but believes in particular that it is not merely facts, but quantifiable facts that are the basis of scientific knowledge. It originates, moreover, from a desire to make sociology a respectable science, to give it the appearance of a science. It is hard to believe that outsiders will long remain impressed (if they ever were) with the knowledge that is yielded by this pseudo-science. Sociologists would be more successful if they concerned themselves with trying to understand and explain social phenomena than with trying to make their subject appear scientific."[5]

Parlett and Hamilton, in their discussion of illumination as an alternative to scientific procedures in the evaluation of innovation in education, adopt a similar line which is of particular relevance in the context of the present project, in itself an innovatory exercise. The authors identify five major shortcomings to educational

evaluations utilising the agricultural-botany paradigm.

i) The paradigm is inappropriate for the numerous relevant parameters which characterise educational situations. Responses to this criticism are the use of very large samples, which makes evaluation prior to application impossible, or the strict control of the environment, the educational laboratory situation, which in itself is highly unsatisfactory in many respects. Both are expensive in money and time.

ii) The paradigm uses research designs which assume that there is no change during the period of study in the case of a before-and-after model and that the material being evaluated or surveyed has a constancy which enables generalisations to be drawn from information gained at a particular time. Especially with regard to the present project, there is a paucity of evidence to support this view.

iii) The paradigm is based on the scientific method of data collection and so tends to impose artificial and arbitrary restrictions on the scope of the study, for example by excluding the use of "subjective" information.

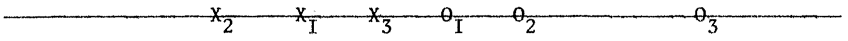
iv) Research based on this paradigm, utilising large samples and seeking generalisations, can easily be insensitive to detail and unusual results.

v) The paradigm does not encourage the varied concerns of participants, sponsors and others to be articulated when this approach to evaluation and research is adopted.

Because of these shortcomings, Parlett and Hamilton advocate illuminative evaluation, based on the social- anthropology paradigm, arguing that this approach "takes account of the wider contexts in which the educational programmes function".[6] The main emphasis is on description and interpretation as opposed to the measurement and prediction of the agricultural-botany paradigm; a concern for process rather than ends. Its advocates claim that the model "stands unambiguously within the alternative anthropological paradigm".[7] It is also the closest to the research and development methodology which was eventually adopted on the present project. However, the move was not a conscious reorientation or a deliberate adoption of an alternative research methodology. It was a shift based on the requirements of the project at specific times which were more consistent with the objectives of the project than an approach based on the conventional scientific paradigm. As noted previously, concern with the conventional survey approach to data gathering arose fairly early in the project. The orig-

inal premise was that a large-scale survey of student and teacher opinion on courses and instruction within a large institution could produce a consistent pattern of disparate responses, differing in extent, but not in kind. This was conceived of as a gap in the perceptions about a course which are held by the student body and their teachers. It was assumed that this gap could be indexed or quantified so as to produce a composite "gap score", notionally indicating the degree of problems evident on a particular course. While it was acknowledged that the responses of staff and students could, in theory, fall at any point along what was in effect a unidimensional scale, the strong expectation was that staff would consistently perceive the course in a more favourable light than their students. Distribution of average scores was expected to mirror those obtained in response to individual questions; for example three courses were expected to produce a distribution of the type illustrated in Table I, below:

LOW SCORE, NEGATIVE VIEW OF COURSE — HIGH SCORE, POSITIVE VIEW OF COURSE



O Staff
X Students

Table I

In retrospect, it is clear that this rather naive expectation was based on a number of unarticulated assumptions:

i) that teachers are wholly committed to courses on which they teach and perceive them, on the whole, in a favourable light.

ii) that students are generally dissatisfied, to differing extents with their courses.

iii) that areas of concern can be rated, placed in hierachical order and given numerical equivalence.

iv) that areas of concern which teachers perceive to be of great importance to the success or otherwise of a course, are perceived likewise by students.

v) that particular issues have a negative or positive effect on the effectiveness of a course in direct proportion to their given numerical value or estimated importance as attributed by teacher or researcher.

vi) that expressed opinions reflect a constant attitude on all the issues and, in some way, are an accurate reflection of attitudes to a course, unaffected by immediately contemporary events.

vii) that the opinions of students and staff on a course are relat-

ively homogenous within each group.

viii) that a structured questionnaire survey is a valid approach to the gathering of information about staff and student perceptions of a course.

ix) that teachers and students will interpret questions framed in the same way, in a similar manner.

Identified in this manner, these assumptions do not stand up to close scrutiny. However, they were implicit in the thinking behind the original stages of the project. The survey was intended to provide evidence of problems related to the disparate perceptions of staff and students on courses and indicators as to how these could be tackled. In the event, the survey provided a negation of the implicit assumptions and a series of results which were in no way amenable to the anticipated quantification. The assumptions were negated as follows:

i) Teachers indicated a wide range of commitment to and enthusiasm for the courses on which they taught. Problems which had not been anticipated but which the open-ended responses identified in part, included servicing courses in other departments and new members of staff teaching courses designed prior to their arrival.

ii) Many courses undoubtedly appear to be meeting the expectations of students enrolled on them and, consequently, the level of satisfaction of many students is high. Indeed, on occasions, students do not identify the problems which concern their teachers and perceive the course in a more favourable light.

iii) It became evident early in the survey that concerns need not be of an overt nature to adversely affect the running of a course. The unstructured comments provided by students, moreover, suggested that the importance attached to various categories of complaints by students on different courses, varied significantly. Such categories include teaching methods, work load, social facilities and tutor-support. There is no way that these can be meaningfully ranked, given numerical value and relative equivalence as a result of such valuation.

iv) Students and their teachers do not necessarily identify the same problems as possible causes of disquiet or as mitigating against effective learning on a course. Furthermore, issues which are perceived as of fundamental importance by one side of the lectern, may appear to be of little consequence to those on the other.

v) Clearly, in view of the evidence relating to iii) and iv), par-

ticular issues cannot be weighted in a useful manner and their effect on courses cannot be predicted in any systematic or numerical way.

vi) The notion that a "one-off" survey can identify a constant attitude among respondents, valid for more than just that particular time, was soon evident as fallacious. Because responses indicated considerable influence by immediate and, probably, short-term, issues any evaluation or rating in relation to a course, will be influenced by these issues and cannot reflect any longer-term attitudes with any certainty. Evidence for the impact of immediate concerns was clearly evident from the unstructured comment.

vii) The evidence from the survey soon indicated a frequent wide variation in the perceptions of both teachers and students about courses. It is possible that the instruments were at fault. If this indeed were the case, it is a reservation which can be applied to all questionnaire surveys. It is a problem of validity which it is very difficult to counteract. This not withstanding, there is no logical reason why groups of students or teachers should have homogenous perceptions of aspects of the courses with which they are involved. Students have disparate motives, aspirations and backgrounds while their teachers likewise vary and have differing levels of commitment and interest in the course.

viii) The methodological shortcomings of survey research have already been referred to; suffice to say that the large-scale, summative type of investigation was not really appropriate, although it was subsequently used as the basis for further investigations in a different capacity.

ix) Discussion, validation exercises and the unstructured comments showed clearly that there was some difference in the interpretation placed on aspects of some questions by teachers and their students. This clearly invalidates any attempts to arrive at a comparable attitudinal index.

It is,therefore, clearly evident that a number of fundamental assumptions upon which the initial stage of the project was based were unfounded. This realisation could have necessitated a complete redesign of the project and a new start based on an alternative hypothesis. However, this approach was rejected, partly because the large-scale survey method, however constructed, could not provide the kind of long-term indicator of course perceptions and morale which were required.

Experience from this first survey caused a shift from an investigation to determine generalised indicators of teaching and learning problems to means by which individual teachers or teams can identify specific problems on their courses. This represents a move to a phenomonological perception of the teaching and learning process, that each such event or linked series of events represent unique happenings. Obviously, there is considerable common ground between, for example, different lectures within one course as well as in broader contexts. However, it is the differnce between such events which would seem to have an over-riding influence on how things actually operate on a course and these are the areas where the teacher (and the students) may well be able to act and counteract negative effects which may have been raised by the particular issue. If it is accepted that each teaching situation is predominantly characterised by its unique features rather than by common denominators with other situations, any attempts to develop "universal panaceas" for teaching problems or their identification is a somewhat spurious and invalid exercise. Once this position became clear, the focus of the project shifted from attempting to measure a perception gap between students and teachers which might be reflective of a genuine and detrimental problem at the "coal-face", to a general acceptance that such problems do exist, in varying forms and to differing extents, on all courses. Therefore, attempts to identify them should be tailored to the particular features and requirements of the courses in question.

The response to this position was the conception, preparation and testing of the booklet, "Communication about Communication". This contains germane ideas for obtaining information about "how things are going" on a variety of aspects of teaching and learning. The approach was not intended to replace face-to-face discussion- rather, it was hoped that the ideas contained in the booklet would facilitate such communication, generating from two questions, addressed to teachers and which formed the starting point to the booklet:

i) To what extent do you discuss the educational process of a course with students; do you give them FEED-IN sta tements?

ii) To what extent to you discuss effectiveness during a course; do you get FEED-BACK statements from your students?

The thinking behind these questions was that the kind of dialogue between teachers and students which they suggest can enhance the

processes of teaching. Feed-in statements refer to areas which cannot be easily formalised and where the onus is very much on the individual teacher to initiate action, although course policy can influence such processes. The booklet contains seven questions for the teacher to muse over which suggest a variety of strategies for action in this area. They refer to the kinds of information about course processes which a teacher can share with his students- aims and objectives, course programme, teaching methods, location of resources, intentions for individual teaching sessions, modes of assessment and general attitudes to a real dialogue about these issues.

Feed-back is most effectively obtained through a face-to-face exchange of ideas and concerns. The short questionnaires contained in "Communication about Communication" were designed to facilitate discussion between teacher and students; to act, in a sense, as ice-breaker where full confidence or co-operation was not yet fully in evidence. While available for use in the form in which they are included in the booklet, the expectation was that questionnaires contained in the booklet would serve as examples to generate ideas for their modification or complete re-writing. This was encouraged in the preamble: "It is envisaged that these questionnaires will be modified by you and used according to particular needs".[8] In practice, this was also encouraged at the onset of each use by staff, even if this merely took the form of adapting existing schedules by blocking out or adding questions. In a sense, the booklet was designed as a propaganda instrument to promote the ideas, rather than the actual, exact content, so as to initiate formalised feed-back as a stepping stone to the more informal, and probably more effective, forms of feed-back to assist in the facilitation of improved teaching and learning.

The examples contained in "Communication about Communication" were designed to be short and framed in simple, every-day language. Certain conventions which are fairly widely practiced in questionnaire design were not adopted; examples of these include the number of response options used and the use of "can't answer" instead of "don't know". The rationale behind these decisions in contained in chapter 4. The booklet contains examples pertaining to a fairly wide range of course situations; these are not intended to be exhaustive. Each example includes comments on the potential use of a schedule in the particular area referred to.

Among the notional advantages of using a standardised and well-tested student feed-back instrument is that it should be both valid and reliable. This will not necessarily be the case with instruments modified or designed as part or in response to this project. Because of the qua si-phenomenological view of teaching which underpins the project, reliability does not become an issue of consequence because no yardsticks for retesting or split-half testing are available. Any differences occurring during retesting with the same group or administration separately to two halves of a target population will possibly be reflective of group characteristics rather than the unreliability of the instrument. In any case, the purpose of the exercise and the frequently small groups involved, do not make reliability testing a worthwhile undertaking. Validity is another matter. While not of crucial importance to the role of the instruments as facilitators, it is none-the-less preferable to operate with reasonably valid instruments. If any credence is to be attached to the diagnostic value of the schedules which teachers prepare, validity becomes an issue of greater significance. Techniques were developed and tested to enable teachers to avoid some of the more serious validity pitfalls; these are described in chapter 6. Finally, a survey of teacher attitudes to the project philosophy and pragmatic rationale was undertaken with the twin purpose of determining the impact of the project and promoting some of the ideas which influenced it. This is described in chapter 7.

The end-product of this thesis is somewhat different to that anticipated at its onset. The purpose of this chapter has been to introduce the reader to the main features of its evolution, to identify the thinking behind the decisions which influenced its progress and to map out what should be seen as largely developmental work in the following chapters. An appraisal of the success or otherwise of the approach which was finally adopted will be attempted in the concluding chapter.

Chapter Two

REVIEW OF THE LITERATURE

The main problem relating to this literature review is the volume of salient material which has been published, world-wide. To attempt to acknowledge all, or even a representative sample of it, would be a futile exercise and really the task of an annotated bibliography, which this review is not. Therefore, it must necessarily be very selective while, at the same time, doing justice to the ideas and influences which relate to the seminal themes of this thesis. Reference to authority is one of the essential millstones of contemporary research and one that is necessary, both to avoid plagiarism and to support or justify arguments or approaches. At the time of Locke or Rousseau, both influential authorities on education, little more was expected than a number of oblique references to past and contemporary thinkers and writers on the subject; ideas might even be borrowed complete and used, unacknowledged. This practice would, of course, be totally unacceptable today and, consequently, this chapter will concern itself with the consideration of two facets of the literature which have had direct and significant influence on the development and implementation of the project. Certain peripheral areas will, of necessity, be excluded; these include the vast and, often, very useful literature on teaching methods in higher education as well as research references to student study skills. These aspects have not been ignored and papers which have been referred to, have been included in the supplementary bibliography which is included as an appendix to this thesis. The two main areas for consideration will be:

a) The literature on evaluation and educational research methodology which has contributed to the development of the project;

b) The literature on student evaluation and student feed-back on teaching.

Literature on Methodology

The social science research model which has been traditionally accepted as respectable in academic circles appears to have been derived directly from that applicable in the pure and applied sciences, employing what Parlett and Hamilton (1972)[9] describe as the "agricultural-botany" paradigm. This classical approach, dependent on a behavioural conception of educational activity, can be described

in three stages (Wiseman and Pigeon, I972)[I0]:

i) the definition of aims in behavioural terms;

ii) the selection and invention of learning situations (in the educational context) to achieve these aims;

iii) the development of methods to measure the degree of success in achieving these aims.

This model can be applied to evaluation procedures; this area constitutes its most significant utilisation within education. Morgan, Gibbs and Taylor (I980)[II] identify four stages in the traditional approach to curriculum evaluation:

i) identify the objectives;

ii) design the learning activities;

iii) evaluate the effectiveness of the learning activities in achieving the objectives;

iv) improve the learning activities in the light of the evaluation.

The predominant goal-orientation of this model is stated clearly by Scriven (I967)[I2]:

> "Evaluation is itself a methodological activity which is essentially similar whether we are trying to evaluate coffee machines or teaching machines, plans for a house or plans for a curriculum".[I3]

This approach to socio-educational research was seen as the ticket to respectability in academia; as already quoted in the introduction, Busfield and Paddon (I977)[I4] suggest that " it originates, moreover, from a desire to make sociology a respectable science, to give it the appearance of a science". However, during the past decade, criticism of the emphasis on "pseudo-science" and the concern for prespecified goals or on objectives in evaluation and educational activity, has been expressed with increasing frequency. As Busfield and Paddon continue:

> "It is hard to believe that outsiders will long remain impressed (if they ever were) with the knowledge that is yielded by this pseudo-science. Sociologists would be more successful if they concerned themselves with trying to understand and explain social phenomena than with trying to make their subjects appear scientific".[I5]

As already quoted, Parlett and Hamilton identify five major shortcomings to this paradigm in relation to educational phenomena. They are worth briefly reiterating:

i) The paradigm is inappropriate because of the numerous relevant

parameters which characterise educational situations;

ii) The research designs assume that there is no change during the period of study and that the material being evaluated or surveyed has a constancy which enables generalisations to be drawn from information gained at a particular time;

iii) The scientific method of data collection imposes artificial and arbitrary restrictions on the scope of the study;

iv) Research based on the use of large samples and seeking generalisations, can be insensitive to detail and the unexpected result;

v) This approach is rarely sympathetic to the concerns etc. of participants, sponsors and others.

Consequently, alternative research strategies have evolved to encompass what Scriven (I972)[I6] has described as "goal-free evaluation". The focus of this approach has been the need to go beyond the intended goals of the project and to look for unintended "side-effects". Scriven argues that over-concern for goals will influence the direction of the research towards the fulfillment of these objectives. Parlett and Hamilton's alternative "social-anthropological" paradigm,which they term "illuminative evaluation" also places greater emphasis on the processes which occur during the research or evaluation study, rather than focusing on outcomes. They advocate the use of diverse sources of subjective and objective information as valid in undertaking the research study. They reject the legitimacy of generalisations drawn from the results of educational evaluation studies; this is a view strongly supported by Bassey (I980)[I7]who, furthermore, argues that, in any case, there are few generalisations in education which are of practical value to teachers. Elton and Laurillard (I979)[I8]advocate the use of qualitative methodologies by demonstrating the irrelevance of research into note-taking based on the experimental, "laboratory" situations; practical information is more likely to be derived from common-sense, experience and more "subjective" assessment. Miller and Parlett (I974)[I9]have likewise employed qualitative techniques in their study of assessment. They identify the manner in which expectations and perceptions can change, when discussing the analysis of interview techniques:

"We are not concentrating particular ly on individual differnces in students' approaches to assessment; indeed we were concerned with what was common or shared. However, when we began the detailed analysis of the data at the end of all the interviews, indiv-

idual differences began to show up strongly and could not be ignored".

The work of Marton in Sweden has been influential in clarifying the contrast between qualitative and quantitative methodologies with reference to studies of student learning. Marton and Svensson (1979)[20] make the distinction between the two in terms of first-order (quantitative) and second-order (qualitative) perspectives.

> "One is observational 'from the outside' and noumenal and the other is experiential 'from the inside' and phenomenal".[21]

Their approach has been to concentrate on the quality of student learning whereas classical research studies have emphasised the measurement of how much has been learnt, expressed as a score. There is a tendency, in discussion of the relative merits of various socio-educational research methodologies, for the viewpoints to become polarised. This seems to be the case with Morgan, Gibbs and Taylor who seem to deny the value of conventional research studies. That they do have their application is acknowledged by Parlett and Hamilton, who state that

> "We are not, of course, arguing here against the use of experimental longitudinal or survey research as such. Rather, for the reasons suggested, we submit that they are <u>usually</u> (my underlining), inappropriate, ineffective, or insufficient for program evaluation purposes".[22]

That the present study has adopted strategies more akin to the "illuminative" model than the conventional approach has been dictated by the philosophy and aims of the project. It seems to be important that these should determine the methodology rather than that a methodology be adopted and an investigation formulated around it.

Feed-back and Evaluation of Teaching

Feed-back or knowledge of results of any behaviour has been clearly shown to effect subsequent similar activity. This is true of a student, a golfer, a cook as well as a teacher. From the psychologists' viewpoints, feed-back provides an extensive and relatively complex field of investigation, with the particular stances adopted by researchers reflecting all the main strands in behavioural and cognative psychology. Annett (1969)[23] outlines the various behaviourist arguments and theories, concentrating, in particular, on the early work of Thorndike and his work on human learning, as well as

more recent research by Skinner and other behavioural psychologists. This discussion of concepts such as knowledge of results, reinforcement, motivation and drive does not directly reflect on the theme of this thesis. However, this general approach within psychology has influenced attitudes and practice within education and, consequently, warrants reference at this point. Furthermore, feed-back is a definable psychological concept; in the educational sense in which it is employed in this thesis and in other related work, the influence of the psychologist is in evidence, although actual useage is somewhat more general and is not adherent to behaviourist concepts, use and general understanding of human activity.

Knowledge of results, however, is a useful concept with which to approach the very wide range of work which falls under the umbrella of feed-back and evaluation of teaching. For whatever purpose the evaluation is undertaken, the actual information will pertain to results of the teaching-learning process,"results" used in its broadest sense and not solely in relation to tests or similar outcomes. In the behaviourist sense, the use of such results would be to the practitioner, the teacher, or conceivably, to an adviser or mentor. The golfing analogy is illuminative in this context; the player plays a shot which settles in a bunker. This information, the knowledge of the result of his shot, enables the golfer to evaluate how he went wrong with his shot and make subsequent adjustments; alternatively, this may be undertaken by his coach.

In practice, all teachers will undertake some form of evaluation of their own performance; this will generally be of an informal, unsystematic and subjective nature, of the "well, how did <u>that</u> go then" type. Research studies have not attempted to investigate this level of evaluation although, in a sense, it is the point of origin for more systematised, larger-scale attempts at evaluation or loosely formulated information gathering. This review, therefore, is concerned with more systematic evaluations of teaching, and particularily those employing student opinion.

The earliest such initiatives were undertaken in the United States; indeed, it is only during the past two decades that the evaluation of teaching has become an issue of any consequence in Britain. In Flood-Page's (I974)[24] extensive monograph on student evaluation of teaching in the United States, the author includes a very large number of references pertinent to the subject, dating back to work at the University of Washington in I924. In the intervening six years

since the publication of the monograph, there has been no discernable abatement in the proliferation of literature on this subject in the United States, while work elsewhere has also increased significantly. Work on the evaluation of teaching is, in the main, concentrated in specific areas:

i) General principles and philosophies of the evaluation of teaching;
ii) Sources of information for evaluation-
    a) student opinion
    b) colleague opinion
    c) personal assessment
    d) other sources
iii) The use of evaluation data;
iv) Practical issues of validity and reliability.

Inevitably, these areas exhibit considerable overlap especially where papers consider the theoretical implications related to an empirical research report.

The general principles and philosophies of evaluating teaching are contained both in the literature on evaluation theory, previously refered to (Morgan, Gibbs and Taylor, 1980[25]; Marton and Svensson, 1980[26] as well as Cox, 1976[27])and, more prominently, in the teacher evaluation literature. In this latter respect, much of the work in the United States and elsewhere appears to be concerned with the identification of the quasi-platonic notion of the "Ideal Teacher", a model to be identified through varying forms of trait and factor analysis and to be used as a model by all aspiring teachers. Evaluation is deemed to play a major part in this process. Examples, from a prolific literature, of such work includes that by Pogue (1967)[28], Boudy (1969)[29], who attempts to develop an all-embracing definition of "good teaching", Subkoviak (1974)[30], Segal (1975)[31], whose study considered student perceptions of good teaching, Miron and Segal's (1980)[32]work on the "Ideal Professor" and Milojkovic and Zimbardo's (1980)[33]study of charismatic teaching. This latter study, for example, identifies a series of qualities as characterising charismatic teaching: total mastery of subject, joy of understanding, insatiable curiosity, sincerity, flawless presentation, overt assertiveness, high energy level, dramatic appreciation, clear affect, positive self-image, sense of perspective and unity of purpose. The Miron and Segal study isolated four main factors as contributing to the student's perceptions of the "Ideal Professor"- advising activities, the role most

valued by students; methods of instruction; contribution to student motivation and intellectual development and, lastly, scholarship. Such studies, while of theoretical value, do not offer much assistance to the teacher in practical situations. Such perceived ideals, however, have been used in the construction of evaluation scales which thus focus on comparisons between an ideal and reality. This approach has been used in the presentation of "teacher of the year"-type awards, for example at the University of Nebraska (Leach, I980[33]).

This basically single-purpose approach to discussion of the evaluation of teaching is, clearly, not very helpful either in practical terms or to a broader analysis of the principles of evaluation. Evaluation, in terms of the studies quoted above, is designed to identify the ideal against which teachers can be measured. Other writers acknowledge that evaluation can be seen as a far more comprehensive and,consequently, complex process. Knapper (I977)[34], in his introduction to a book containing a wide variety of perspectives on the evaluation of teaching in higher education, lists the benefits and problems of evaluation and does not really achieve a "yea" or "nay" conclusion; more pertinently, he manages to identify some of the widely divergent, sometimes conflicting, methods and purposes of evaluation which would make any such judgement imprudent. Miller (I980)[35]describes what he sees as a comprehensive evaluation scheme to cover all contingencies of method and purpose; the result appears to be an unwieldy and excessively complex system from which, in practice, teachers and administrators would be forced to select and, consequently, find themselves no better off than had they used a combination of the varying schemes already available.

A generalised consideration of evaluation of teaching must, inevitably, be a direct function of the educational climate in which it is conceived. Thus, the Miller scheme is a reflection of the United States higher education ethos and has very limited transferability. Writers about the United Kingdom scene appear to have considerable reluctance to discuss the implications of evaluation of teaching in its broadest sense; this is perhaps owing to a level of uncertainty as to what is meant by the concept in this country, as expressed by Cox (I975)[36]:

> "....it could be concerned with the assessment of lecturers, or research into different teaching methods or the evaluation of courses or educational systems".

It is indicative of British traditions and prejudices in higher education that discussion of evaluation frequently turns to the status, academic freedom and role of teachers (Kennedy, I975[37]; Driver, I975[38]; Merriman, I975[39]). Miller (I975)[40] identifies this frequent concern of teachers:

> "Teaching is essentially rather a private business, in the sense its skills are so difficult to convey to others- let alone to measure. How does one describe the complexities of what make for a good relationship with students? In other words, a great deal of educational process is intangible, subjective, changeable".

In the United States, concern for the evaluation of teaching evolved in response to demands for accountability in universities and colleges. This accountability, a factor of fairly recent vintage in Britain, is to a variety of sources- the student consumer, employers and tax payers being perhaps the most significant. Evaluations were demanded to provide evidence for decision and choice making. Until recently, these demands have not influenced British higher education to the same extent; consequently the sources and methodologies of evaluation and, indeed, the uses to which data has been put , has been markedly different from general practice in the United States. As will be outlined subsequently, attempts to transfer evaluation schemes from the United States to the British context have not been successful.

In the United States, the bulk of formalised evaluation of teaching uses student opinion; while evidence from departmental chairmen and deans constitute an almost universal source for evaluation (Seldin and Waken, I974[41]; Seldin, I980[42]), this is not sought in a systematic or objective manner. While improvement of teaching is always an avowed aim of the evaluations, there is also the frequent practice of using the data for course selection, promotion, tenure and other such issues (Giles and Leonard, I973[43]). Classic examples from the numerous American schemes include the Purdue scales (Remmers, I939[44]) and Illinois work (Spencer and Aleamoni, I969[45]). A modern student evaluation scheme is IDEA (Instructional Development by Evaluation and Assessment), which is the result of work at the Center for Faculty Evaluation and Development in Higher Education at Kansas State University. Hoyt (I973)[46], one of the originators of the scheme, claims that IDEA is based on a set of definitions, summarised by de Winter Hebron (I978)[47] as follows:

i) 'Effective Teaching' may be defined as that which results

in, or correlates with, effective student learning.

ii) One of the factors most conducive to successful student learning is the student's sense of his or her own satisfactory progress.

iii) Hence how effective the teaching is may be measured in terms of the student's perceptions of his own progress in that teacher's courses.

iv) Teaching, however, is also intentional: teachers have purposes- to assist the students to learn about certain things in certain ways; in brief, objectives. To be meaningful, therefore, the progress perceived must be that towards the objectives chosen by the teacher.

v)Teaching is also a set of behaviours, in the frequency or completeness of each of which individual teachers vary. What teaching it is that is how effective, therefore, can be defined in terms of what teaching behaviour the students perceive the teacher to perform how often or how completely.

vi) Finally, like any other kind of statistical data, data about student perceptions of progress and student perceptions of behaviours is amenable to the laws governing all statements of tendency, provided that the population is sufficiently large. Thus, specific behaviours and specific progresses, given a large enough population, may be tested for correlations and thus provide diagnosis of particular teaching behaviours to be changed or continued.

IDEA is designed as a diagnosis system for input into a staff development programme and has been developed from a data base of over two million student responses.It differs, therefore, from many American schemes in its diagnostic intent but is characteristic in its size and the implications which can be derived from its scale and cost of development. It is clearly intended for wide-scale use in a variety of institutions and disciplines and thus emphasises a belief in the uniformity of teaching and learning in higher education.

IDEA formed the starting point for a British equivalent,AID (Assessment for Instructional Development) at Newcastle Polytechnic (de Winter Hebron, I979[48];I980[49]). The initial assumption was that field testing would show that transfer of IDEA to the United Kingdom would reveal the following three features:

i) that the instrument would prove practical to administer;

ii) that questions would need some superficial rewording for

transfer, but not much other alteration; and

iii) that British and American scoring and , therefore, norms would be similar.

These assumptions anticipated that the main thrust of the project would involve the establishment of a local data base, which was to be obtained from mainly Polytechnic sources. However, only the first of these assumptions was completely confirmed. Terminology presented a number of transfer problems, while the norms achieved in the trial-run showed virtually no similarity to those gained in the United States. Consequently, the AID programme required a completely fresh start, and this was undertaken using the perceptions of students and faculty from a range of disciplines in twelve British institutions of higher education. Teaching objectives were identified for teachers by major discipline areas while students were required to select major attitudes and behaviours. These are now in the process of development for use as a feed-back questionnaire which, once administered, can be referenced against the data bank norms. As with IDEA, the intention of AID is diagnostic, although it can be employed for other purposes. Work on AID highlights the problems of cultural transfer but assumes that inter- institutional exchange and transfer is valid. The fact that, despite the proliferation of work in the United States, instruments and techniques are not appropriate for direct transfer, has necessitated the development of evaluation schemes suitable for use in the British context. It is not possible, here, to describe all work in this field; however, a selection of some of the research and development projects which have influenced the work in this thesis, will indicate the central characteristics of teaching evaluation studies in Britain. Early work appears to have been concentrated on "one-off" research-type initiatives, seeking empirical evidence of student perceptions of teaching methods and other aspects of their courses. Examples of such work include Foy's (1969)[50] work on the evaluation of lectures; Cooper and Foy (1969)[51] on study habits, attitudes and academic achievement; Falk and Dow (1971)[52]; Flood-Page (1971)[53]; Startup (1972)[54]; Dow and Cox's (1972)[55] summative evaluation of a medical school class; Smithers and Musgrave's (1972)[56] investigation of student reactions to teaching; Boud's (1973)[57] evaluation of laboratory work and Asbury's (1975)[58] summative evaluation of a one-term course. It is interesting to note that these are all post-1968; the upsurge of interest in the evaluation of teaching has been linked to the general student unrest of the late 1960's and early 1970's and this would

seem to support this association.

Relatively early work such as that cited in the examples above, has significantly influenced subsequent developments; so has the much greater volume of American literature. Recent years have seen significant developments in three areas of the evaluation of teaching in this country: evaluation by students; peer evaluation and self-evaluation. The bulk of this work is designed to offer practical assistance to, and have direct influence on, teaching and learning and, while researched and te sted extensively, is not characterised by the same limited "psychology-type" experimental ethos of some of the earlier work.

Probably the best known evaluation scheme in Britain is the Student Feedback project at North East London Polytechnic (Bradbury and Ramsden, I975[59]). This work also bears close resemblance to much of the American activity in the area of student evaluation of teaching. The project developed a 23 statement questionnaire as the central feature of the evaluation; these questions were framed so that the students rated both their importance and the specific performance of their lecturer in respect of that trait. The former was used in interpreting responses to the main investigation. Central features of the NELP programme are that use by academic staff is entirely voluntary; the schedule is flexible (items can be added or removed to suit demands of staff), and the results of the evaluation are confidential to the participating teacher to enable him to find out more about his teaching. A number of other schemes in Britain have been modelled on the work at NELP, notably the Student Feedback Questionnaire at Leicester Polytechnic (Clarke, I978[60]). This package seeks information on aspects of the teaching strategies adopted on a course as well as details of specific problems encountered. Clarke developed the package to assist colleagues to monitor their own teaching at a personal level as well as in conjunction with the expertise offered by his staff development unit.

The work of McConnell and Hodgson (I979)[6I] at Surrey University is also questionnaire-based. From a starting point which sees most student feed-back evaluation as too general in content, they use Kelly's (I955)[62] repertory grid techniques to develop a series of nine questionnaires on the basis of the student perceptions of teaching. The initial step is to administer a general schedule to enable the identification of specific areas for further investigation. For this purpose, more detailed schedules are available; these cover knowledge

of subject, maintaince of student interest, note taking, clarity and comprehensibility, enthusiasm of lecturer, student perception of lecturer, lecturer attitude, and encouragement of student participation. This "one plus eight" model is similar to that envisaged for "Communication about Communication", although the content and the exclusive emphasis on lectures is somewhat different.

Also employing Kelly's repertory grid techniques is the TARGET (Teaching Appriasal by Repertory Grid Elicitation Techniques), which is the work of Keen and Hopwood (I976)[63] at Plymouth Polytechnic. Their work is the result of dissatisfaction with the survey-type feed-back mechanisms and makes no attempt to classify or quantify teaching into categories such as good, bad effective or ineffective. Keen and Hopwood argue that a teacher's pedagogic style may be eminantly suited to one group of students but be totally unsuccessful with another. The TARGET analysis is an attempt to identify those skills which are required in the teaching of a particular group of students. Repertory grid techniques were used to obtain teacher and student perceptions of "effective" and "ineffective" teachers which form data banks for different disciplines. Teachers are then able to compare their own profiles, as perceived by themselves and their students, with discipline norms and can take appropriate action to remedy or alleviate problems.

The TARGET scheme involves both student and teacher in the appraisal process; the work at the University of Birmingham (Black et al, I976[64]; Broadman and Rutherford, I978[65]) is a flexible system which seeks to utilise all appropriate sources of information. The central feature of the programme is two-way peer-evaluation by colleagues in related disciplines by which a reciprocal evaluation is initiated through observation to encompass all facets of teaching and learning on a course. An important confirmatory process which features on this programme, subsequent to peer assesssment, has been the use of a student evaluation questionnaire which is de signed specifically as a result of the initial evaluation and is therefore tailored to the perceived problems on a course. As a consequence, the questionnaires exhibit considerable variety in content and in the emphasis placed on particular areas of concern by students, as noted by observation and interviews, and they are thus seen by students as pertinent to their own experiences. Informal peer assessment is frequently practised as part of evaluation and teaching development programmes; however, the Birmingham scheme is unusual in this country in its attempt to systematise

and standardise procedure in this respect.

In Britain, developmental work in teaching evaluation has tended to be undertaken by specialised staff develoment or research units and, indeed, these bodies have frequently maintained an interest and commitment in the subsequent use of procedures and instruments. In view of the current economic climate, the future of such units may be uncertain and there is likely to be a move towards greater self-reliance, if evaluation for personal teaching improvement is to continue. As previously indicated, crude, informal, self-evaluation is undertaken by all teachers. However, attempts to systematise such activity is relatively unusual. Early work includes the procedures developed by Simpson (I965)[66] in educational psychology. The use of a self-evaluation schedule is advocated by Clarke (I978)[67], who produced a "Self-evaluating Questionnaire" which requires the teacher to indicate, immediately after a teaching session, his ratings of a series of his own behaviours; the questions are similar to those in a student evaluation scheme. Fox's (I977)[68] "Lecture Analysis Check Sheet" does not depend solely on post-lecture memory but requires the audio-recording of a lecture. This is then played back and the teacher responds to a series of questions as if he were the student. Both these procedures are valuable in creating awareness among teachers of what they could be on the look-out for in more informal self-evaluation; they would not be intended for use after every lecture but could assist in the creation of a systematic, internalised evaluation scheme.

Both Clarke and Fox acknowledge their systems to be limited and somewhat crude in conception, serving a useful training and awareness function. Somewhat more comprehensive schemes, which include a self-evaluation element, have been developed in this country. Bridge's (I976)[69] "Monitorkit" is described by the author as " a resource package for university teachers who wish to monitor their own courses". The source book contains ideas and examples for monitoring through use of questionnaires, discussion, interviews and teacher records. While not directly self-evaluation, the important feature here is that the teacher is required to design and administer his own evaluation; this process clearly could include self-evaluation and there is a section which enables teachers to develop the basic ideas further and produce other monitoring tools. The procedure is pragmatic and is broken down into five stages:

i) Deciding upon the aims of the proposed monitoring procedure;

ii) Devising a programme to achieve these aims;

iii) Putting the programme into practice;

iv) Analysing the results;

v) Taking action on the basis of these results.

What "Monitorkit" clearly acknowledges is that successful evaluation demands information to be obtained from every valid and accessible source; this is emphasised by the work of Seldin (I980)[70] in the United States but is all too frequently ignored by the proponents of one particular approach or another. This flexibility is clearly in evidence in the Birmingham scheme, as well as in the very comprehensive workbook developed by Habeshaw (I979)[71], "Towards a system of continuing self-development for teachers". This project is designed to assist in staff training and induction, but is valid for all teachers in higher education who are interested in initiating their own self-development programme; in the author's own words, the system "is based simply on the principle that the teacher ultimately must become responsible for himself and his development as his career progresses".[72] The workbook contains sections on assessment and self-assessment; setting objectives; learning activities; materials and methods; evaluation. Material has been collected from a wide variety of sources and the scheme, according to the author, has the following characteristics:

i) it works with self-defined problems;

ii) it is a learning approach;

iii) it is eclectic and flexible;

iv) it is activity based;

v) it is systematic;

vi) it is largely individualised;

vii) it is problem-solving;

viii) it is essentially a plagiarist strategy;

ix) it is a demythologising strategy, taking the tools from the expert, and making them available to the teacher.

While both the work of Bridge and Habeshaw cover a broader ambit than strictly evaluatory activity, their philosophy and approach is closely akin to that described in this thesis and therefore their work is included at the conclusion to this chapter.

Clearly not all pertinent issues have been tackled in this review. For example, "does evaluation actually improve teaching?" (Abrami et al, I979[73]); the much discussed "Dr. Fox" effect on evaluation by students (Boffey, I974[74]; Leventhal et al, I979[75]); validity and rel-

iability (discussed in chapter six of this thesis); as well as more general and fundamental questions for and against the use of evalustion in teaching (Krutzen, I979[76], as well as many other writers) could have justifiably been included in this chapter. They have not been ignored but, in general, the issues and contexts to which they are addressed are very different from that operating in relation to this thesis and , consequently, they do not contribute directly or usefully to the discussion.

Chapter Three

THE INITIAL ENQUIRY

The rationale behind the early stages of the project are outlined in the introduction to this thesis. The initial investigation was prompted by the belief that staff-student communication, in its broadest sense, is one of the most important factors in determining the success or otherwise of a course. Where some barrier to such communication exists, for example, a discernable and seemingly irreconcilable gap between staff expectations and intentions for a course and the perceptions of what actually occurs, which are held by their students, teaching and learning on that course cannot be at its most effective. Described analog ously, if staff and students line up at opposite ends of a tug-o-war rope, inevitably less can be achieved than would be the case were the pull co-operative and in the same direction. Education is a co-operative process and, generally, does not benefit from friction and opposition in the main partnership between teachers and taught. Aspects of the postulated gap cover a range of teaching and learning situations. Excessive work demands by staff; ill conceived practical experiments with mal-functioning or inappropriate equipment; seminars for which students are unprepared, are problems which, when identified, can be remedied fairly easily. Others may not be so amenable to action; the problems may be less evident, lying below the surface, inarticulated but, none-the-less, in need of identification and attempts at action. Awareness of problems, in itself, can be of benefit in attempting to deal with them.

Attempts to identify and tackle any gap, in whatever form it is manifested, should, preferably, be made at individual or course level, possibly as part of a staff development programme. Institutional involvement in a formal manner in relation to this kind of issue is, in most cases, inappropriate, likely to be detrimental to staff co-operation, of dubious assistance to teacher-student co-operation and is unlikely to be an effective policy in the identification and solving of teaching-learning problems. Diagnosis and treatment within a course or course unit is most effective if confined to the level closest to the teaching situation at which it is possible to deal with the problem, while ensuring the involvement all those with a direct commitment or interest in the course or unit. This may be an individual teacher or a course team, depending on circumstances. In

other words, if an identified gap is seen to relate to the activities of a particular member of staff, the determination and remedy for the problem should lie within his control alone, although he may choose to share the problem with colleagues or someone with a professional interest in the issue. Likewise, evidence of a "gap" within the wider parameters of a year group of a particular course, should be the concern and responsibility of those tutors directly involved with that year, but need not involve the whole department.These were, and remain, the beliefs held by the writer, and they have underpinned both the initial enquiry and subsequent developments on the project.

The initial stage of the investigation took the form of a large-scale survey of staff and student perceptions of teaching at Trent Polytechnic. The purpose of the survey was to determine whether the postulated gap was a reality, whether it was in evidence between teachers and their students in the institution and, if it was, to investigate its characteristics and extent. This was attempted by means of questionnaires, administered to staff and students on full-time degree courses in the Polytechnic.

The first step was to seek the co-operation of departments; this was broached through a circular to all Heads of Departments. This was followed up by discussions with Heads or their nominated representatives about the project and , subsequently, with those responsible for the courses to be approached. A total of 1161 students and 221 staff participated in the survey-stage of the project during the Spring and Summer terms, 1977. The students were enrolled on 14 first year and 12 second year degree courses in 13 departments. Final year students were not included because it was not deemed fair on them at that stage of their courses. The investigation was confined to degree courses to achieve a consistency of level and course-type; likewise, all courses were full-time. All schools of study in the Polytechnic were represented. The teachers were members of staff with a direct teaching commitment on the courses; in most cases they were from the same departments as the students, although some operated in "servicing" capacities. Complete anonymity of individuals, courses, departments and schools was guaranteed. This was essential to gaining the necessary co-operation of all those involved with the project. Even at this stage, it would not be appropriate to breach this confidence.

The purpose of the survey exercise was to compare the perceptions of students and staff so as to determine whether the postulated "gap"

could be quantified. A scheme was planned whereby responses for both could be summated and aggregate "course scores" determined to determine the extent of divergence in staff and student perceptions of the course. The schedule contained 13 items covering staff and student perceptions of a variety of aspects of the course in which both had a stake. The questions to both were complimentary but some were slightly different in phrasing to cater for their different roles. The main thrust of the questionnaires was through the use of structured questions, but there was scope for both to append open-ended comment in addition at the end of the schedule. As well as this, students were provided with a supplimentary open-ened form to return separately. The questionnaires were issued to students, by arrangement with their teacher, at the start or termination of a class session and they were asked to complete it immediately for return to the researcher who was in attendance. This was seen as an important step to ensure good returns and guarantee anonymity. The open-ended schedule was given out for return at a later date, in a provided envelope through the internal mail. A very high response rate was achieved with the main questionnaire, the only losses being non-attenders at the lecture when the survey was undertaken. The postal returns were by no means so high but were received from about half the respondents to the main questionnaire. The researcher's presence at the time of administration enabled the purpose of the project to be explained in some detail and any questions or concerns to be answered. The result of this was that no students refused to co-operate with the project. Staff were asked to complete the questionnaires in their own time; these were mailed to them with a covering letter, although many had attended an initial briefing meeting, held in all participating departments. Closer supervision of staff was not considered practical or justified. Inevitably, the response rate, although, at about 70 per cent it was very satisfactory, was not as good as that of the students. The staff respondents were a representative sample of those mailed, in terms of department and lecturer grade.

The large-scale survey was intended to validate possible questions for subsequent use in a different context later in the project. The main areas of concern to staff and students were included and it was hoped to develop a reliable and valid "gap indicator" for general use by teachers in higher education. Such an approach is dependent on a large initial sample and this accounts for the use of the written schedule. More incisive and valuable responses may have been obtained

through the conducting of structured interviews or discussions with both staff and students, but the manpower available and time available prevented this being undertaken on a large scale. However, prior to the construction of the final instru ment, discussions were undertaken with both teachers and students about the proposed questions and their implications.This proved an invaluable exercise in the validation of the schedules. The instrument, in a draft of its final form, was tested out on student groups who were not participating in the project. Some modifications were undertaken as a result. This process followed extended discussions between the researcher, his supervisor and other academics as to the merits and drawbacks of particular items.

Analysis of the questionnaire returns was undertaken using the Statistical Package for the Social Sciences (SPSS), using computing facilities at Nottingham University, linked to the Regional Computer Centre at the University of Manchester. The package facilitated the basic analysis and crosstabulation which was required without much specilalist assistance. The objectives of the exercise did not demand the more detailed analysis of variance and other statistical tests of which the package is capable, and so these have not been incorporated here. In retrospect, some of the questions have proved to be of considerably less value than others; they have been omitted or dealt with in less detail in this chapter. The item order which prevailed in the schedule has not been maintained, although the original number is retained. The order in which the questions have been dealt with is intended to reflect their perceived significance and the association which is evident between them, so as to achieve a coherence and relevance in this chapter. The original questionnaires are included as appendices to this thesis. Reference to the original schedules will indicate those items which were omitted; these cover essentially hypothetical concerns (questions I2 and I3) to which responses included a high proportion of blanks and"don't know " responses. Likewise, question 5 asks respondents to speculate on the attitudes of their teachers or students to listed teaching methods-again, responses were limited and those obtained do not give sufficient confidence in their validity for inclusion. Question I0 relates to personal tutors and is somewhat ambiguously worded; furthermore, departmental policy and practice on this particular issue varies considerably with the consequence that responses cannot be helpfully summated.

The Responses

Possible replies to most of the questions were given on a five-point scale, including one "don't know" option. The conventional format to be found in social science survey questionnaires is a five-point scale and an additional "don't know" category. In practice, this allows for a central, 'non-commital' response with two on either side of this central point of the continuum reflecting different degrees of commitment to a statement, opinion or practice. This tends to encourage responses in the centre of the continuum and, therefore, little attitude or opinion differentiation. This approach was rejected in the present project as contrary to the objective of identifying a perception gap by means of the survey. Consequently, the central and 'non-commital' reply was omitted. It is a matter of some conjecture as to whether responses in this central "box" and those under "don't know" differ significantly in kind or intent. Therefore, the "don't know" response has been included to cover replies such as "don't know", "no opinion", "question meaningless", "I would need to write an essay to answer this one" etc. Subsequent stages of the project saw this response amended to the more satisfactory "can't answer"; the implications of the "don't know" response were explained to all student respondents as part of the introductory talk, but teachers did not have this point clarified.

To enable interpretation to be simplified, it was decided to amalgamate responses reflecting a similar opinion, but differing in extent. For example, to the question, "Are you satisfied with your course?", "very satisfied" and "satisfied" have been taken together as have "dissatisfied" and "very dissatisfied". This practice is a post-hoc recognition that the difference between the differentiation is marginal and probably more apparent than real. This was confirmed by the comments which were appended to the structured schedules; in a number of cases, opinions were expressed of a far stronger nature by those indicating a moderate response to the original question than by students or teachers selecting the extreme viewpoint. This amalgamation was also deemed desirable in the attempt to establish a quantifiable "gap".

Figures are presented in the tables in percentages; in some cases, the numbers in a group of staff or students was relatively small but these figures have been omitted in the interests of anonymity. Student figures in the tables are placed on the top row in each case with the relevant teacher percentage below. The courses are coded A to Z. The

coding was determined by responses to question 7, shown in Table I. This question, relating to course satisfaction, is a fundamental one, upon which all the others, in a sense, can be said to hinge, and it is consequently placed first. Other questions are coded similarily to facilitate easy comparison with this question.

The level of satisfaction or otherwise which both staff and students express about their course, is probably an important indicator as to its overall success. If a large proportion of either group are very dissatisfied, for whatever reasons, it is likey that the effectiveness of the course in causing maximum student learning, will be impeded. It is perhaps inevitable that a proportion of both students and staff will be dissatisfied with the course at any given time. Indeed, this may reflect issues peripheral to the main teaching-learning concerns of the course, even social or domestic problems, which impinge and affect attitudes to a particular course. A question can be mooted as to whether there is an acceptable level of dissatisfaction which departments should be willing to tolerate. If there is, this will inevitably vary according to the nature of the course, its intent and the type of students it is catering for, as well as the attitudes and ideals of the staff. I believe that any such question initiates a spurious exercise which is of little value to those active on a course and concerned with its smooth running. It is up to them to gauge whther the dissatisfaction expressed by their students is sufficient to warrent concern. Nevertheless, it is a question which could easily be posed by an "outsider" surveying the figures from a survey such as the present investigation. It is also a question implicit in the attempt to identify a quantifiable "gap" as a result of this survey; this particular question was central to this exercise and the realisation that its results could not be used in the anticipated manner contributed significantly to the reorientation of the project.

In the survey, the level of student satisfaction (ie. those optng for 'completely satisfied' and 'satisfied') ranges from 96 per cent to 50 per cent. The corresponding figures for the staff sample are I00 per cent and 54 per cent. Overall, some 20 per cent of both groups expressed dissatisfaction with the course. The causes of this are varied although, as already indicated, it is the existence of the problem and the extent to which it is malignant, rather than the varied origins, which should promote concern in the first instance. It should be stated that the level of dissatisfaction which the survey identified is very liable to fluctuation and may well change considerably over a period of time. Some indications of the

Question 7 — For students: 'To what extent are you satisfied with your course?'

For staff: 'To what extent are you satisfied with the course?'

Possible answers: completely satisfied/satisfied/dissatisfied/utterly dissatisfied/don't know

1a This lists for each course-year-group the percentages answering 'completely satisfied' or 'satisfied'

Course year group	A	B	C	D	E	F	G	H	I	J	K	L	M
Students	96	96	93	92	90	89	89	89	88	84	83	81	81
Staff	91	83	91	75	45	100	73	67	100	92	70	100	100

Course year group	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Mean of total sample
Students	80	75	75	73	71	70	69	67	63	62	60	58	50	79
Staff	57	100	100	73	71	100	86	60	92	67	67	58	83	81

Note: Course-year-groups in rank order of students' percentages. This ranking has been used to label the course-year-groups.

1b This lists the percentages answering in each category (for the total sample)

	completely satisfied	satisfied	dissatisfied	utterly dissatisfied	don't know
Students	8	70	17	2	3
Staff	9	72	17	1	1

Note: Replies from 1161 students and 221 staff

Table 1.

Question 6 — For students: 'From your experience on this course, have you felt any gap between the expectations of lecturers and your experience of the teaching and learning process?'

For staff: 'From your experience on this course, have you felt any gap between your expectations and the experiences which students have in the teaching and learning process?'

Possible answers: no gap at all/a slight gap/a very wide gap/don't know

2a This lists the percentages answering 'no gaps at all' or 'a slight gap' for each year group

Course year group	B	A	G	R	K	C	J	M	Q	E	L	N	S
Students	88	82	82	79	78	77	76	74	72	71	71	70	70
Staff	66	91	64	86	52	73	76	83	91	46	89	44	33

Course year group	P	V	D	H	T	F	I	Y	W	Z	X	U	O	Mean of total sample
Students	69	68	67	67	66	64	58	54	54	53	49	49	47	67
Staff	75	92	25	83	72	78	88	86	50	100	17	100	50	70

Note: Course-year-groups in rank order of students' percentages. Labelling as in Table 1.

2b This lists the percentages answering in each category for the whole sample

	no gap at all	a slight gap	a wide gap	a very wide gap	don't know
Students	6	61	18	4	11
Staff	6	64	15	1	14

Note: Replies from 1161 students and 221 staff

Table 2.

causes of dissafisfaction were obtained through the open-ended questions. In this section, staff and students were asked to indicate those aspects of the course with which they were most and least satisfied. Both categories covered a wide range of issues. Points of particular satisfaction included, from the student view point, freedom of study; the relevance of the material to career aspirations; personal tutoring and professional placement. Dissatisfaction was expressed over a variety of the course content, teaching methods, resources available and about the lecturers themselves. Many of the concerns appear, out of context, to be of a relatively trivial nature and ones which, it would be hoped, would also be directed at tutors for immediate action. However, it is difficult to avoid the feeling that this survey has released a series of concerns which might otherwise have not been expressed. Generally speaking, teachers raised fewer points in response to this question. When some commitment to the course was evident on the part of the teacher, in that he had contributed to the design or planning of the course, mainly positive comments were forthcoming. Where this was lacking and the teacher was either new or taught in a servicing capacity, dissatisfaction was far more evident, particularily focusing on a lack of student and staff involvement in the planning, development and running of the course. Quotations from the schedules support this point. One teacher wrote: "I'm new and the logic behind the course is probably no clearer to me than to the students", while another commented, " I don't belong to the department and therefore feel little commitment to the course, although, in my view, it is far from perfect".

The purpose of the investigation was to determine whether the idea of a "gap" between teachers and students, could be substantiated. Replies to the open-ended question relating to course satisfaction suggest that a frequent cause of discontent is attributable to a communication problem between staff and students and therefore the inclusion of a direct question about the "gap" appeared to be justified. The responses to the question are tabulated in Table 2.

A similar proportion of both staff and students indicated that they thought a wide or very wide gap exists between the perceptions of teachers and students on a course. The survey suggests that about one fifth of those on both sides of the lectern are conscious of a serious communication problem in the teaching and learning process. The evidence of crosstabulating this data with that relating to sat-

This table shows the cross tabulation of replies to question 6 (satisfaction) and question 7 (gap)

3a Student replies (in percentages)

Replies of those satisfied with the course:

slight or no gap	wide or very wide gap
83%	17%

Replies of those dissatisfied with the course:

slight or no gap	wide or very wide gap
46%	54%

The difference is statistically significant to the 0.01% level on the chi-square test. That is to say, the likelihood of this level of association between student satisfaction and low gap and student dissatisfaction and high gap arising by chance is 1 in 1,000.

Replies of those aware of no gap or a slight gap:

satisfied	dissatisfied
87%	13%

Replies of those aware of a wide or very wide gap:

satisfied	dissatisfied
55%	45%

The difference is statistically significant to the 0.01% level on the chi-square test

3b Staff replies (in percentages)

Replies of those satisfied with the course:

slight or no gap	wide or very wide gap
87%	13%

Replies of those dissatisfied with the course:

slight or no gap	wide or very wide gap
55%	45%

The difference is statistically significant to the 0.01% level on the chi-square test.

Replies of those aware of no gap or a slight gap:

satisfied	dissatisfied
89%	11%

Replies of those aware of a wide or very wide gap:

satisfied	dissatisfied
60%	40%

The difference is statistically significant to the 0.01% level on the chi-square test.

Table 3

isfaction indicates that those identifying the gap were also, generally speaking, those dissatisfied with the course to which they are attatched. A communication problem as a cause of discontent has already been identified by the open-ended responses. Table 3 reinforces this thesis. In the region of 70 per cent of both groups responded either "a slight gap" or "no gap at all" to the question, but, as was the case with the previous question, the range between courses can be seen to be considerable.

The open-ended questionnaire asked respondents: "Do you think that a gap between the expectations of students and those of staff in the teaching and learning process is beneficial or detrimental in any way?" The majority of replies stressed the detrimental effect of the gap, arguing the need for close contact between staff and students." I think any great difference between the two is detrimental as neither can fully understand the others' view and they are likely to be working to different ends to some degree" (a first year student). This view was qualified by another student who wrote that "it (a gap) does give me a good laugh. Lecturers expect so much work to be done that it is silly and therefore funny." A number of replies saw a gap as beneficial and these all stress the point brought out in the following student's comments: "A gap is beneficial in that it breeds authority, which every educational structure must have and also makes students respect their lecturers, when they use their superior intelligence to help students. However, there again, lecturers expectations do tend to be over-expectant and personally I tend to feel rather fragile and stupid in their presence at times.....".

Central to the concept of the gap is a breakdown of communications between teachers and taught. A recognition of the need for dialogue between the two groups has led to the wide-spread establishment of formalised bodies, representative of staff and students,in many institutions of higher education. Their function is to discuss problems relating to courses and departments which are seen to be of mutual concern. These bodies, in the form of Departmental Boards of Study or Staff Student Consultative Committees, were in existence in all the departments included in this study. The overall returns do not reflect well on the bodies which have been established to facilitate staff and student communication. While some cases are exceptions, generally speaking, neither staff or students atta ch much value to the established Boards and Committees and, indeed, a

Question 9 — For students and staff: 'How do you rate the work of your Staff Student Consultative Committee/Departmental Board of Studies?'

Possible answers: very worthwhile/worthwhile/sometimes worthwhile/worthless/don't know- no experience.

4a This lists the percentages answering 'very worthwhile' or 'worthwhile' for each year group

Course year group	C	G	P	R	E	H	U	Q	J	B	L	A	N	D
Students	77	33	31	29	28	22	22	20	20	17	16	14	13	11
Staff	46	18	100	57	9	17	60	82	52	0	0	27	0	87

Course year group	T	F	X	Y	W	I	O	Z	M	V	K	S	Mean of total sample
Students	9	9	9	8	8	7	7	5	0	0	0	0	12
Staff	22	0	0	0	0	36	67	17	33	24	13	17	29

Note: Course year groups in rank order of students' percentages. Labelling as in Table 1.

4b This lists the percentages answering in each category for the whole sample

	very worthwhile	worthwhile	sometimes worthwhile	worthless	don't know/ no exp.
Students	2	10	29	19	40
Staff	10	19	32	10	29

Note: Replies from 1161 students and 221 staff

Table 4.

This table shows the cross tabulation of replies to question 6 (satisfaction) and question 9 (staff-student committees)

5a Student replies (in percentages)

Replies of those satisfied with the course:

Rate committees very worthwhile/worthwhile	Rate committees hardly worthwhile/useless
22%	78%

Replies of those dissatisfied with the course:

Rate committees very worthwhile/worthwhile	Rate committees hardly worthwhile/useless
13%	87%

The difference is statistically significant at the 0.02% level on the chi-square test

Replies of those rating committees very worthwhile/worthwhile:

satisfied	dissatisfied
87%	13%

Replies of those rating committees hardly worthwhile/useless

satisfied	dissatisfied
79%	21%

The difference is statistically significant at the 0.02% level on the chi-square test

5b Staff replies (in percentages)

Replies of those satisfied with the course:

Rate committees very worthwhile/worthwhile	Rate committees hardly worthwhile/useless
46%	54%

Replies of those dissatisfied with the course:

Rate committees very worthwhile/worthwhile	Rate committees hardly worthwhile/useless
20%	80%

The difference is statistically significant to the 0.01% level on the chi-square test

Replies of those rating committees very worthwhile/worthwhile:

satisfied	dissatisfied
91%	9%

Replies of those rating committees hardly worthwhile/useless:

satisfied	dissatisfied
74%	26%

The difference is statistically significant to the 0.01% level on the chi-square test

Table 5.

This table shows the cross tabulation of replies to question 7 (gap) and question 9 (staff-student committees).

6A Student replies (in percentages)

Replies of those aware of no gap or slight gap:

Rate committees very worthwhile/worthwhile	Rate committees hardly worthwhile/useless
22%	78%

Replies of those aware of wide/very wide gap:

Rate committees very worthwhile/worthwhile	Rate committees hardly worthwhile/useless
15%	85%

The difference is statistically significant at the 0.01% level on the chi-square test

Replies of those rating committees very worthwhile/worthwhile:

no gap/slight gap	very wide/wide gap
82%	18%

Replies of those rating committees hardly worthwhile/useless

no gap/slight gap	very wide/wide gap
74%	26%

The difference is statistically significant at the 0.01% level on the chi-square test

6b Staff replies (in percentages)

Replies of those aware of no gap/slight gap:

Rate committee very worthwhile/worthwhile	Rate committee hardly worthwhile/useless
43%	57%

Replies of those aware of very wide/wide gap:

Rate committee very worthwhile/worthwhile	Rate committee hardly worthwhile/useless
37%	63%

The difference is not statistically significant to the 0.05% level on the chi-square test

Replies of those rating committees very worthwhile/worthwhile:

no gap/slight gap	very wide/wide gap
82%	18%

The difference is not statistically significant to the 0.05% level on the chi-square test

Table 6.

large proportion of both groups claim no experience or no knowledge of them at all. The data was collected between February and May and, therefore, adequate time had elapsed for all respondents to have been informed of the activities of any such committee in operation.

Cross-tabulation indicates that students who are dissatisfied with their courses or who identify a communication gap, evaluate the work of staff and student forums even less favourably than their colleagues whose rating on the other issues is more favourable. This difference is even more pronounced in the case of staff, of whom a greater proportion give the committees a favourable evaluation.The survey clearly indicates the need for some rethinking about the function and composition of groups designed to facilitate teacher and student communication. It is apparent that the level and content of discussion is peripheral to the real issues which are of concern to both groups. These are seldom discussed in sufficient depth. Subsequent stages of this project have evolved ideas to counteract this problem.

One fundamental area of communication and co-operation which has frequently been neglected relates to the aims and objectives of a course. There appears to be some indication of feeling from both sides of the teaching and learning partnership that these aspects are of little concern to students. This is reflected in the open-ended responses which describe this province as the sole concern of the teacher or of little interest or consequence so long as the requisite degree is obtained at the end of the course. However, a majority of respondents stressed the importance of an awareness of these aims and objectives to students. This thinking is well argued by an editorial in The University Teacher (1978)[77]:

> "students frequently complain they are unsure of what is expected of them in a particular course. At no time,runs their complaint, does the lecturer explain the aim of the course, the reasons why particular methods of teaching are being employed, or why one form of assessment is being used instead of another. It is often affirmed by lecturing staff that this is none of the students' business anyway. The student role is to accept what the lecturer sees fit to give him. Though such a view may be philosophically defensible, it is not likely to facilitate student learning for it makes no use of the very powerful psychological

Question 5 For students: 'To what extent are you aware of the educational aims and objectives of your overall course of study?'

For staff: 'To what extent do you believe your students are aware of the educational aims and objectives of their overall course of study?'

Possible answers: fully aware/reasonably aware/slightly aware/unaware/don't know

7a This lists for each course year group the percentages answering 'fully aware' or 'reasonably aware'

Course year group	R	K	T	C	J	B	I	M	V	D	A	G	W	Z
Students	100	100	99	98	96	96	94	94	94	93	93	89	89	88
Staff	57	80	64	80	83	80	100	100	100	75	100	90	100	50

Course year group	S	L	E	F	N	Q	X	P	O	U	Y	H	Mean of total sample
Students	88	87	86	86	85	83	83	81	78	78	63	44	88
Staff	83	100	82	78	0	91	50	75	100	40	83	83	77

Note: Course year groups in rank order of students' percentages. Labelling as in Table 1.

7b This lists the percentages answering in each category for the whole sample

	fully aware	reasonably aware	slightly aware	unaware	don't know
Students	29	59	8	2	2
Staff	17	60	17	2	4

Note: Replies from 1161 students and 221 staff.

Table 7.

principle of expectation. If a student knows what he is expected to achieve, he has a goal towards which he may orient his behaviour. Ideally this goal might be established through staff-student discussion but if the idea of co-operative course planning is repugnant or administratively impossible, a lecturer may still increase the power of expectancy by providing a rationale for his course objectives".

The present study incorporated a question to both teachers and students which asked to what extent both groups believed students are aware of the aims and objectives of their courses, shown in Table 7. It is evident that the concern expressed in the above quotation is not universally applicable to the sample in this study. Overall, a large majority of both groups were of the opinion that students are aware of the educational aims and objectives of their courses. However, the students themselves appear to have greater confidence in this than their teachers. Over 20 per cent of the staff sample believed that students were either unaware or only slightly aware of the aims and objectives of their courses. This is a cause for some concern in respect of some of the courses, especially course N, where none of the teachers believed that their students had this awareness. The range of responses between courses is considerable; consequently, despite the overall picture, on some courses less than half the staff and student samples indicated that students were reasonably aware of the aims and objectives of their course of study.

The questionnaire asked respondents to rate various elements of courses; ie. lectures, seminars, tutorials, practicals, individual study and professional placement. Responses to a number of these were limited because of some confusion as to what was exactly meant by them or because they were not in widespread use; these have been omitted from the tables. Overall, lectures, seminars, tutorials and individual study were all rated favourably by both teachers and students, although the actual range shows some variation between courses. Despite the popular practice of "knocking" the lecture method , it is highly rated by both samples. Overall, some 91 per cent of the student sample and a similar proportion of the teachers, rated lectures either "very worthwhile" or "worthwhile". The range of these responses for the individual courses was 56 per cent to 100 per cent for students and 55 per cent to 100 per cent for their teachers.

Question 4a — For students and staff: 'How do you rate lectures?'

Possible answers: Very worthwhile, worthwhile, hardly worthwhile, useless, can't answer

Overall responses (in percentages)

	Very worthwhile	worthwhile	hardly worthwhile	useless	can't answer
Students	42.8	48.8	5.3	0.9	2.2
Staff	47.5	43.4	6.8	0.5	1.8

Note:/ Responses from 1161 students and 221 staff

Table 8.

Question 4b — For students and staff: 'How do you rate seminars?'

Possible answers: Very worthwhile, worthwhile, hardly worthwhile, useless can't answer

Overall responses (in percentages)

	Very worthwhile	worthwhile	hardly worthwhile	useless	can't answer
Students	22.3	45.6	14.0	5.8	12.3
Staff	35.7	36.7	10.0	2.7	14.9

Note: Responses from 1161 students and 221 staff

Table 9.

Question 4c — For students and staff: 'How do you rate tutorials?'

Possible answers: Very worthwhile, worthwhile, hardly worthwhile, useless, can't answer

Overall responses (in percentages)

	Very worthwhile	worthwhile	hardly worthwhile	useless	can't answer
Students	38.5	37.6	13.8	3.6	6.5
Staff	52.9	25.3	10.0	1.4	10.4

Note: Responses from 1161 students and 221 staff.

Table 10.

Question 4d — For students and staff 'How do you rate individual study?'

Possible answers: Very worthwhile, worthwhile, hardly worthwhile, useless, can't answer

Overall responses (in percentages)

	Very worthwhile	worthwhile	hardly worthwhile	useless	can't answer
Students	51.2	37.7	3.5	0.5	7.1
Staff	61.1	23.1	2.3	2.3	11.1

Note: Responses from 1161 students and 221 staff

Table 11.

Seminars are clearly less favourably rated by both students and staff than lectures; this may reflect some ambiguity as to what constitutes a seminar and perhaps even less effective use of this teaching method than is the case with lectures. The open-ended responses suggested that the practice of using seminars as "mini-lectures" is relatively widespread. The individual course-range for responses, "very worthwhile" and "worthwhile" were 42 per cent to 94 per cent for students and 25 per cent to I00 per cent for staff.

The rating of tutorials is very similar to that for seminars. This may well reflect some ambiguity as to what differentiates these two teaching modes. While a distinction can be made on the basis of size of group and content-orientation, in practice the two terms are frequently interchanged. The individual course range for responses, "very worthwhile" and "worthwhile", is I00 per cent to 46 per cent for students and I00 per cent to 50 per cent for staff. Tutorials and seminars are the main facility in higher education for close face-to-face staff and student contact, and are the forums where concerns and questions are most easily raised. Therefore, the significant body of opinion which gives them a poor rating is somewhat surprising. The central role of individual study in degree-level work is acknowledged by the generally favourable rating it receives from both teachers and students. In no instance did less than 77 per cent of either student or staff sample rate individual study as "very worthwhile" or "worthwhile".

Students were asked to estimate their individual weekly study load while their teachers were asked to state what time they thought students would spend on their academic studies on the basis of the work load given. It is very difficult to postulate a reasonable estimate for individual study; this will vary considerably depending on the nature of the course. However, an overall working week in the region of 40 hours, similar to that operating in industry, seems a reasonable guideline with which to work. Many students will work considerably longer. The individual study component of this will depend on the time-tabled contact time. In terms of staff-student communication and the facilitation of effective learning, it is clear that the staff expectation of individual study should match, fairly closely, the average which their students claim to be their norm. Overall, the average difference was 5 hours, with students estimating 22 hours as the normal individual study commitment each week and their teachers estimating I7 hours. The difference was considerably greater on some courses; the

extreme examples were a difference of 15 hours between the student average estimate of 26 hours and the staff estimate of 11 hours and a difference of 10 hours between the student estimate of 24 hours and the staff estimate of an average 34 hours individual study each week. In some cases, the estimates were very close, as little as 2 hours. Clearly, these results must be treated with some caution, because the estimates must, inevitably be viewed with some scepticism; however, a consistently large discrepancy could be an indicator that the students and teachers view the course in a somewhat different light.

The reasons as to why a student undertakes a particular course of study may have considerable bearing on his approach to individual elements of the course. If, for example, his goals are such that the content and process of a course are of relatively little consequence so long as the final certification is achieved, then issues of communication and the effectiveness of learning for its own sake, may not be of paramount importance. Students were asked to indicate their reasons for embarking on a particular course of study; their teachers were asked to pinpoint the reasons why they expected their students would undertake the course. The structure of the question is shown in Table 12. Three major options were included; to take a definite step towards a career; to experience higher education; and to pursue personal academic interests. Various intermediate points were included between these three outlooks. In retrospect, however, the validity of this framework can be questioned; the "extreme" points indicated do not have exactly the same differences between them, although the question and the analysis of the responses assumes this. Furthermore, other reasons are excluded from consideration and, therefore, the real range of attitudes may not be reflected by the responses to this question. In an attempt to simplify responses, the replies in Table 13 have omitted the intermediate responses; these have been divided equally between their respective major options; thus those in circle 2 have been equally divided between circles 1 and 3. Replies in circle 4 were divided equally between the three alternatives.

The main inference which can be drawn from the responses to this question relates to the emphasis placed by both staff and students on career factors in determining choice of a course. In individual courses, as many as 80 per cent of the students and 90 per cent of staff opt for this reason. This response pattern is to be expected, especially in view of the avowed Polytechnic ethos and the vocational orientation

Why are you undertaking this course of study?

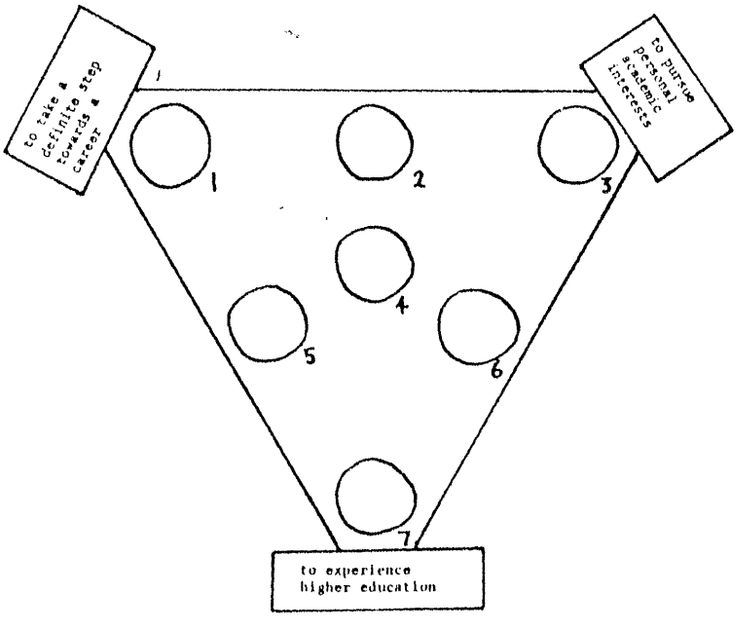


TABLE 12

Question 11 — For students: 'Why are you undertaking this course of study?'
For staff: 'Why should students undertake this course of study?'
Possible answers: As above

This table shows course replies ranked by the proportion of students indicating 'career' as their choice. Answers in percentages

Course		I	C	T	J	X	V	Q	M	A	S	P
Career	Students	80	80	79	79	76	75	72	71	71	70	66
	Staff	33	90	59	83	84	74	59	53	76	67	20
Academic Interests	Students	10	4	11	8	12	7	18	10	5	6	28
	Staff	46	7	13	7	8	15	27	28	12	33	60
Higher Education	Students	10	12	10	13	12	16	11	19	21	24	6
	Staff	21	3	28	3	8	11	14	19	12	0	20

	G	O	D	Z	Y	W	B	E	K	N	H	U	L	R	F	Total
Students	64	64	63	61	59	59	58	56	56	48	45	36	35	25	21	65
Staff	76	56	52	53	38	44	59	72	68	65	83	20	28	5	11	58
Students	23	12	16	13	17	29	30	37	15	33	35	26	31	43	51	16
Staff	3	31	40	20	32	27	17	16	9	14	0	50	28	40	17	20
Students	12	17	18	26	24	12	12	7	29	16	22	26	34	32	28	17
Staff	12	13	8	20	15	19	17	12	17	21	0	30	44	55	72	19

Note: Labelling as in Box 1. Replies from 1461 students and 221 staff

Table 13.

This table shows detailed replies to question 11 for all staff and students (in percentages)

For number	1	2	3	4	5	6	7	Can't answer
Students	45.3	14.6	3.1	12.1	17.1	4.0	2.1	1.6
Staff	38.7	14.4	3.6	18.5	12.2	5.9	3.6	3.2

Table 14.

of many of the courses surveyed. Whether a similar pattern would be reflected in a university is doubtful. Cross tabulation of the responses to this question with a number of the indicators of communication effectivenesss, suggest that students who are satisfied with their course, who are aware of the aims and objectives and who are not particularily aware of a perception "gap", are considerably more career oriented than their colleagues who do not feel this way. This may, of course, be reflective of the type of student or the nature of the courses involved rather than indicating a realistic association. In the case of staff, the picture is reversed, and those who place greater emphasis on career factors, are likely to be less satisfied , perceive a greater gap and do not believe students to be aware of the course aims and objectives. It is difficult to interpret this trend in any detail without indulging in pure speculation. It may well be that students with a strong career orientation may have a greater tolerance and determination on a course, so long as their examination goals are met, while their teachers, aware of the importance of the course to their students, are more conscious of shortcomings and problems.

This survey certainly confirms the legitimacy of the concept of a "gap" between the perceptions of staff and students in higher education; this has been shown clearly in the responses to a number of the questions outlined above. However, it is equally clear that this "gap" cannot be quantified or generalised in any meaningful manner. Therefore, plans to undertake this were abandoned. As previously indicated (see chapter one), a number of the implicit assumptions upon which the initial survey was based had to be rejected or revised. The consequence of this was the development of a series of instruments to identify some of the multitude of causes of a "gap" in staff and student perceptions; not to quantify them, but to create awareness of their presence on a course so that remedial action could be initiated. These problems are unique to the particular course contexts in which they are found and cannot be generalised elsewhere. These instruments were packaged, in draft form, in the booklet, "Communication about Communication", which is described in the next chapter.

Chapter Four

COMMUNICATION ABOUT COMMUNICATION

The purpose of the survey outlined in the previous chapter was, initially, to test the hypothesis that a measureable gap exists between the perceptions of students and their teachers on courses in higher education. The intention was to devise mechanisms by which such a gap could be identified, quantified, and subsequently, remedial action be suggested to reduce its impact on the teaching/learning process. As outlined in the introduction this hypothesis was under-pinned by a number of rather naive assumptions which in the event did not stand up to investigation.

These were:

i) that teachers are wholly committed to courses and perceive them, on the whole, in a favourable light;

ii) that students are generally dissatisfied, to differing extents, with their courses;

iii) that areas of concern can be rated, placed in hierachical order and given numerical equivalence;

iv) that areas of concern which teachers perceive to be of great importance to the success or otherwise of a course, are perceived likewise by students;

v) that particular issues have a negative or positive effect on the effectiveness of a course in direct proportion to their given numerical value or estimated importance as attributed by teacher or researcher;

vi) that expressed opinions reflect a constant attitude on all the issues and, in some way, are on accurate reflection of attitudes to a course, unaffected by immediate events;

vii) that the opinions of students and staff on a course are relatively homogeneous within each group;

viii) that a structured questionnaire survey is a valid approach to the gathering of information about staff and student perceptions of a course;

ix) that teachers and students will interpret questions framed in the same way in a similar manner.

The evidence from the survey, clearly does not support the initial hypothesis or the assumptions which underlay it. The information which can be legitimately gleaned from the survey is relatively

limited, a function both of an unfullfilled hypothesis and inappropriate instrument with which to gather data in a wider context. What information of value was obtained pertained to individual courses and not to aggregated data. No valid information about the state of teaching in the surveyed institution can be drawn, except that there is considerable diversity in the attitude of both staff and students to the courses on which they teach and study. This diversity in responses in relation to specific courses was the main finding of the survey. It is clear that teachers and students do perceive their courses in different lights, but no generalized comments can be made about these differences. What both the structured questions and the additional comments elicited very clearly was that "gaps" do exist, but that their characteristics, extent and origins are unique to each situation. It was, furthermore, clear that respondents, both teachers and students, had answered questions in the light of the immediate situation at the time of completing the questionnaires rather than attempting a more generalized appraisal. This, in retrospect, was inevitable and is very likely to influence responses to most student feedback schedules. Merely to couch the questions in terms which imply generalization about the entirety of a course is not sufficient. It is clear that such responses will be coloured by the "here and now."

Consequently, this realisation necessitated a radically different approach to the use of student feedback on teaching and the use which is made of information relating to the perception gap. This gap is evident in most courses- however, its nature, causes, and extent are unique to the specific situation in which it is manifested. Therefore student feedback information is only valid within the immediate context in which it was elicited. It can be used to identify aspects of any "gap" which is present at a particular time; student feedback, in this sense, can be diagnostic but not in any way prescriptive. How the teacher reacts in the light of the information provided, is a matter for his own professional judgement, alone or in consultation with colleagues. The teacher can anticipate possible causes for a gap between his own perceptions and those of his students. Problems will be most effectively dealt with by dialogue; indeed a genuine exchange of views is frequently a more useful approach to identifying problems than more "artifical" pen and paper approaches. However, teaching

situations in higher education do not always allow for useful dialogue, particularly early on in a course. Classes are frequently too large to obtain any but the most forceably expressed opinions; the teacher may only meet a group infrequently or operate from another department in a servicing capacity and, consequently find it difficult to gain useful rapport with the student group. In these situations a "pen and paper" instrument may act as a facilitator to discussion; it may be an "ice-breaker" to enable students and teacher to discuss issues of mutual concern. It may also give the student body a feeling of involvement and genuine interest in the organization and teaching of their course which, in itself, is no bad thing. However, there is another side to engendering interest and discussion about a course in addition to seeking information from students. Such a process can be pre-empted by the teacher through the provision of as much information as is possible about the course, its content, objectives, teaching methods and use of resources.

"Communication about Communication" was written with these two approaches to the facilitation of discussion about teaching and learning in mind. It is an ideas booklet, intending to stimulate rather than dictate methods to improve discourse about this issue. It is subtitled "Ways of improving learning by stimulating communication between teachers and students about the educational processes in which they are engaged."

The two approaches to achieving such communication are formulated in questions addressed to teachers:

i) "To what extent do you discuss the educational process of a course with students; do you give students FEED-IN statements?

ii) To what extent do you discuss effectiveness during a course: do you get FEED-BACK statements from your students?"

In the area of Feed-in statements, little more than suggestions for action can be undertaken. How these are formulated, when instigated and what form they take will depend on the discipline, the level of course and the characteristics of both the teaching and the teacher himself. The booklet's consideration of this side of the activity is confined to seven questions for the teacher to muse over:

1. Do you issue students with a statement of aims and objectives at the start of a course; do you discuss these at the start; do

you discuss these on subsequent occasions?

2. Do you issue a programme giving the major teaching events of a course?

3. Do you discuss the teaching methods for a course; do you explain your choice?

4. Do you assist students in locating resources for individual learning; for example, do you issue book lists and library guides?

5. Do you outline your intentions for individual teaching sessions?

6. Do you explain why particular assessment procedures have been adopted for a course?

7. Do your students wish to discuss the above questions with you and is such discussion profitable?

Some or all of the activities suggested in these questions are common practice with many teachers. There are many other activities which can be legitimately placed under the umbrella of "feed-in statements", relating for example to links between laboratory and theoretical work or suggestions for effective study practices for particular subjects. The philosophy behind the "feed-in statements" is that teaching and learning is an open and co-operative activity; any action which the teacher may take to enhance either of these aspects can only be of mutual benefit to students and teacher. This philosophy also underlies the section of the booklet on "feed-back statements" which constitutes the main thrust of the research project. Feed-back on teaching from students is, as has been indicated in previous chapters, a controversial and multi-farious activity. It has taken a wide variety of forms and has been initiated with markedly differing political and educational intentions. Many of these are rejected outright by this project as should be already clear. This is emphasised by a statement in the introduction to the booklet:

"A tenet of our approach is that the questions suggested are for teachers themselves to ask and not for administrators and others to use for purposes of evaluating courses or teachers. The questions are not designed for research investigations either. Their purpose is to improve communication between teachers and students."

The booklet contains six questionnaires relating to various teaching/learning activities which are common to higher education, comprising:

i) an overall "Course Effectiveness Questionnaire;"
ii) a "Lecture Evaluation Schedule;"
iii) a "Seminar Evaluation Schedule;"
iv) an "Essay Writing Evaluation Schedule;"
v) a "Practical Class Evaluation Schedule;"
vi) an "Examination Evaluation Schedule;"

Such division is not unique, although developed separately. The work of McConnell at the University of Surrey reflects similar thinking. Clearly there are other aspects of teaching and learning which might warrant investigation on some course in higher education; the overall approach can easily be adapted to comply with such requirements. Indeed it is categorically stated that the schedules contained in the booklet can be employed as they are or may be adapted, extended or completely re-written to suit the particular requirements of the course in question. The extent to which this was actually undertaken can be seen in the case studies in the next chapter. Where appropriate, teachers were encouraged to reject completely the schedules as contained in the booklet and draft an alternative to suit their own needs. For staff who choose to use the schedules in the form printed, a pro-forma for compiling results is included in the booklet in respect of each schedule. The wording used in the draft schedules was deliberately kept simple and teachers were encouraged to bear this policy in mind when adapting schedules. The kind of simple and everyday language which has been used is open to criticism on ground of ambiguity. For example, responses to a question such as "To what extent are you satisfied with your course?" will depend on the interpretation which is placed on words such as "satisfied". If the schedule were a research tool, or one from which generalizations were to be drawn, it would clearly be necessary to avoid use of terms which may be seen as ambiguous. However, these enquiries are at a pragmatic level into specific teaching events. It is acknowledged that accurate objectivity is not attainable. Precise interpretions will vary but general trends and attitudes, positive and negative, will be evident. Thus the combining of responses will give an indication of the "corporate pulse" of the student group and, provided that it is recognized as no more than that, it can be useful. It is, of course, a volatile indicator, liable to change. Attempts to avoid some of the more glaring ambiguities, led to the development

of the simple validation procedures which are described in chapter 6. Likewise, no attempt has been made to adhere strictly to research conventions with respect to the scaling or responses in the schedules. The scaling is on three or four points as seemed approprat e to each item and in a fashion which appeared both comprehensible and meaningful to respondents. Continuous scales, which are frequently employed in student feedback questionnaires, do not satisfy either of these criteria and make interpretation of results more difficult. Instead of the conventional "don't know" response, a wider-embracing "can't answer" has been employed. This is in order to cover responses such as "don't know,""question not meaningful." "not applicable," "no single answer suffices," "I would need to write an essay to answer" etc. Questions eliciting a high proportion of "can't answer" responses are, therefore, likely to have been inappropriate to the investigation at hand and require further consideration.

One general model for the use of "Communication about Communication" was suggested to staff in the institution when they were sent copies. This was to use the "Course Effectiveness Questionnaire" as a general "pulse-taking" exercise, to determine whether and where particular problems, regarding the course, may lie. Subsequently, more detailed information about specific areas could be sought, either utilizing the other schedules or ones designed specifically. This model was implicit in the design of the booklet and the expectation was that many participating staff would follow it. However, as the case studies indicate, the teaching situations in which "Communication about Communication" was utilized did not necessarily suit the approach suggested and only in a limited number of instances was it followed.

It was soon evident that the booklet promoted interest among staff for a variety of reasons which had not been fully anticipated. These reasons all fall broadly under the umbrella of the facilitation of communication between teachers and students, but have their own characteristics and motivations. In generalised terms, the reason for using "Communication about Communication" included:

a) as a junior-staff training and awareness exercise;

b) as a technique for getting to know a group of students;

c) as a means of assisting course review prior to a CNAA visitation;

d) as a means of identifying problems with a course recently adopted and due for change;
e) to identify weak points in lecturing style;
f) to assist in the introduction of evaluation and assessment concepts;
g) to promote similar "self-review" among practicing teachers.

It is evident, therefore, that the actual uses which were made of "Communication about Communication" show considerable divergence from the intentions and expectations which were originally identified for it. Such changes are consistent with the overall development of the project which, ultimately, seeks to meet the practical needs of teachers in facilitating communication with students rather than attempting to impose some theoretical and pre-determined model upon them. Therefore the evaluation of the success or otherwise, of "Communication about Communication" cannot be attempted against pre-determined objectives and criteria. The evaluation is presented in the form of a number of case studies which, briefly, describe initiative which originated from the booklet. They may provide ideas for further use of the material or may be deemed inappropriate. By sending a copy of the booklet to all academic staff in the institution, some considerable interest, both positive and negative, was stimulated into the educational and political implications of student opinion on teaching and learning. This, in itself, may stimulate and influence future practice, even if indirectly and without reference to this particular project. Such developments cannot easily be evaluated. The case studies provide direct evidence for the use of "Communication about Communication." This is the most positive evaluation available and one which alone justifies the project.

Chapter Five

CASE STUDIES

The booklet, "Communication about Communication", was developed and tested so as to provide teachers with the germs of tools to facilitate improved communication about the teaching and learning process in higher education. The previous chapter outlines the theoretical and practical rationale of the package,up to the time of its publication, as a series of draft schedules for consideration by teachers. The booklet ia included as an appendix.

The schedules and procedures were tested extensively at Trent Polytechnic and elsewhere. A copy of "Communication about Communication" was sent to all academic staff at Trent Polytechnic, early in the autumn term of the I978-79 academic year. Teachers were invited to try out the procedures in a manner appropriate to their particular courses,either as a self-conducted exercise or with my direct assistance and involvement. The former approach allowed little scope for feed-back for my use as a researcher, but was consistent with the overall aims and philosophy of the project which included a commitment to confidentiality as well as placing practical application before research considerations. The latter approach, adopted by many of the teachers, allowed a detailed monitoring of all perspectives of the initiatives: the course context; the source of initiative for implementation (individual, course team etc.); the staff involved; the process of schedule adaptation or construction; the procedure; student reactions; the results of the evaluation and of the validity tests (see chapter six); the subsequent reactions of staff and the overall effects of the exercise. This information provided detailed and wide-ranging feed-back on the potential and practical uses to which the draft procedures could be put; indeed, a number of these were not anticipated at the time that "Communication about Communication" was developed. These included:

i) as a training device and awareness exercise for junior staff. A senior course tutor in a specialised, technical department expressed concern about a course in which student interest and staff commitment appeared to be low. Junior staff were strongly encouraged to employ techniques suggested in the booklet, both to develop student interest in the course and as a means of creating awareness about their own teaching. Teacher feed-back from this exercise was positive

and led to further work in that department.

ii) as a technique for getting to know a group of students. A teacher operating in a service capacity utilised an amalgamation of the course effectiveness and lecture schedules, early in a course, to encourage discussion and interest from a group of students with whom communication appeared strained. Where this initiative differs from the anticipated model is that administration took place at a time when useful comments about the course could not really be expected; it was too early. The actual results of the questionnaire were of little interest to the teacher, although he utilised them to initiate discussion with the group.

iii) as means of assisting course review prior to a Council for National Academic Awards visitation. The results of this exercise were kept internal to the course team and not presented to CNAA. It was used as part of a wider strategy to identify problems and issues relating to the existing course so that they could be considered in the preparation of the re-submission to CNAA.

iv) as a means of identifying problems in a course for which responsibility had recently been taken. In this instance, a teacher took over responsibility for a laboratory class at the start of an academic year and had no opportunity to alter content or practice from the previous year. He undertook a detailed experiment-by-experiment evaluation of the course and its parallel lecture course on theory so as to enable him to develop a linked and coherent course compatible with his own ideas and philosophy. He also used the exercise to increase student awareness of the aims of each practical session and sought feed-back on their understanding and experience of each session.

v) to identify weak points in lecturing style. This fairly conventional use of the schedule was undertaken by a lecturer whose native language was not English. He wished to identify particular aspects of his lecturing on which to concentrate particular attention. He also had the secondary purpose of improving rapport with the student group by being seen to acknowledge his difficulties.

vi) to assist in the introduction of evaluation and assessment concepts. This was the most unexpected use of "Communication about Communication". It involved a three day course for prac-

ticing professionals in a caring profession, who were to supervise and assess students during their field work practice. Regular evaluatory exercises, verbal as well as "pen and paper", were undertaken so as to introduce concepts and pitfalls relating to evaluation of performance and self-evaluation of teaching activities. A similar intent was evident in the use of instruments with a group of teachers on an in-service course; they were encouraged to undertake such exercises with their own students, either using similar instruments or alternatives developed with their own context in mind.

These outlines indicate some of the uses to which "Communication about Communication" was put during its testing stages. A more detailed discussion of a number of the initiatives will indicate the nature of the work in greater depth. These will be outlined in a manner which protects the anonymity of students, individual teachers and departments. This is essential to both the credibility of the project and to the future of educational research in the institution. It would not be appropriate to include details of all the initiatives mounted; rather, a small number will be detailed and common threads and features drawn from others to supplement discussion. As the examples already outlined already indicate, the exercise was characterised by the variety of uses to which the draft procedures were put; therefore, generalisation must necessarily be tentative. This report is compiled on the basis of 25 detailed case studies which were carried out in Trent Polytechnic. The full case record has been filed but the need for confidence means that no more than general reference can be made to them.

It is relevant, at this point, to comment briefly on the context in which I operated as the researcher; my status, and relationships with all those involved in the project, staff and students. As a relatively young research assistant, a problem of credibility was clearly a potential hinderance in so far as academic staff were concerned, especially in such a sensitive area as teaching and learning. In practice, I found little evidence of this as a hinderance to my work; indeed, in general, teachers accepted the expertise I was offering them without reference to status or age. With regard to the student body, no problems were encountered here in establishing a working rapport. I was accepted as a junior staff member, detached from the academic department involved as well as from the institutional administration. I explained my position clearly to all student groups with whom I worked. However, I am confident from the detailed discussions which I had with

students individually and in groups, that the replies which I obtained in collaboration with a member of the teaching staff did not differ in any significant manner from those which the teacher would have obtained by initiating and implementing the pro-rocedure above. Because of the nature of the instruments used and the theoretical premises relating to the "one-off" nature of each feed-back exercise, this contention cannot be empirically tested, as clearly any repeat or split-half process will be evaluating a different educational and logistical situation in terms of those involved and in terms of the time of implementation.

The Case Studies

A total of eleven studies were undertaken in one technical, vocational department. They all relate to sub-degree courses and were the result of contact and discussion with one senior member of the department. Following the circulation of "Communication about Communication", he expressed enthusiasm about the procedures and wished to use them himself, and to persuade junior colleagues to do likewise, particularily in relation to a course where a number of problems relating to student interest and teacher commitment, were evident. He said," I have worked in industry for many years and nobody can tell me much about my subject, but I'm a novice in so far as teaching is concerned. A procedure like this will, I hope, tell me more about the process of my teaching."
Five courses, taught by this teacher, were evaluated. Three related to the three year sub-degree course, mentioned above, which had a student intake of both school leavers and those with experience in industry. These courses constitute Case Studies I-3. The final qualification is virtually a pre-requisite for promotion in management. The evaluations were undertaken, using a modification of the Lecture Evaluation Schedule. The teacher's aim was to obtain a picture of how his students viewed his teaching during each year of the course. As the researcher, I was seen as a consultant in pedagogic enquiry, and the modifications to the schedule were the result of consultation between the teacher and myself. Question I was altered from "How useful are my lectures in helping you to achieve the course objectives?" to "How useful are my lectures in helping you to pass the examination?"- in the context of this course, these two alternatives virtually constitute the same thing. In the same way, "course objectives" in question 7, was replaced by reference to the

Table I5

LECTURE EVALUATION SCHEDULE CASE STUDY I

Course

10
No. of replies

The purpose of lectures is inevitable to transfer knowledge from lecturer to students. This is the case irrespective of whether the lecture is intended to arouse interest, to provide factual information or to evaluate ideas and data.

From time to time in a course of lectures, it seems worthwhile to ask 'How's it going?' The following schedule is intended to provide me with some feedback on the effectiveness or otherwise of my series of lectures.

	a	b	c	d
1. How useful are my lectures in helping you to pass the examination? a = usually useful b = sometimes useful, sometimes not c = rarely useful d = can't answer	10	–	–	–
2. How relevant do you think my lectures will be to work in your intended career? a = usually relevant b = sometimes relevant, sometimes not c = rarely relevant d = can't answer	10	–	–	–
3. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't anwer	5	5	–	–
4. How do you rate my use of aids - blackboard, projectors etc? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer	10	–	–	–
5. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer	9	1	–	–
6. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer	7	3	–	–

For responses to question 7 see below

1. The regional accent is sometimes difficult to follow but these problems are quickly sorted out.
2. Sometimes there is a difficulty with understanding certain words of the language barrier, but I would say the lectures on the whole are excellent. You are one of the few lecturers who makes lectures interesting.

Table 16

LECTURE EVALUATION SCHEDULE	CASE STUDY 2	12
	Course	No. of replies

Instructions similar to those in Case Study I.

	a	b	c	d
1. How useful are my lectures in helping you to pass the examination? a = usually useful b = sometimes useful, sometimes not c = rarely useful d = can't answer	11	1	-	-
2. How relevant do you think my lectures will be to work in your intended career? a = usually relevant b = sometimes relevant, sometimes not c = rarely relevant d = can't answer	12	-	-	-
3. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer	9	3	-	-
4. How do you rate my use of aids - blackboard, projectors etc? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer	11	1	-	-
5. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer	10	?	-	-
6. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer	11	1	-	-

Supplementary Question:

	a	b	c	d
8. Has the course to date been relevant to your recent industrial experience? a = usually relevant b = sometimes relevant, sometimes not c = rarely relevant d = can't answer	9	3	-	-

For responses to question 7 see below

1. A very good teacher. It is typical that he is the one asking these questions
2. Sometimes a bit aggressive in asking questions - makes me panic.

Table I7

LECTURE EVALUATION SCHEDULE — CASE STUDY 3 — 15

Course	No. of replies	a	b	c	d
Instructions similar to those in Case Study I.					
1. How useful are my lectures in helping you to pass the examination? a = usually useful b = sometimes useful, sometimes not c = rarely useful d = can't answer		8	6	1	–
2. How relevant do you think my lectures will be to work in your intended career? a = usually relevant b = sometimes relevant, sometimes not c = rarely relevant d = can't answer		10	5	–	–
3. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer		10	5	–	–
4. How do you rate my use of aids – blackboard, projectors etc? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer		12	2	1	–
5. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer		13	1	–	1
6. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer		9	5	1	–
7. Has the course to date been relevant to your recent industrial experience? a = usually relevant b = sometimes relevant sometimes not c = rarely relevant d = can't answer		10	3	2	–

examination.An additional question was constructed to ask, "How relevant do you think my lectures will be to work in your intended career?". In retrospect this question has a distict weakness, because of the mixed nature of the group, half with and half without industrial experience. This modified schedule formed the basis for all the evaluations in the department, although some further changes were made.

Likewise, the procedures for implementation established a pattern which was closely followed during subsequent exercises in the department. At the end of the lecture, the teacher left the room and I explained to the students the purpose of the evaluation (in terms of the lecturer's intentions). I issued the forms which were completed there and then and which I collected. I then discussed with the students the procedure and its implications. During the first run with first-year students, they were co-operative and enthusiastic and thought the procedure a useful and worthwhile one. However, they pointed out that the lecturer was one of their best. One student said," I wish we'd have the chance to say something about the others". There was some evident scepticism whether criticisms would be acted upon.

The responses were counted, tabulated and returned to the teacher later on the same day. With the first year group, the only difficulty related to the teacher's regional accent. The summary was subsequently discussed by teacher and students, but I was, unfortunately, not present to observe the discussion. At a later meeting, I found the students appreciative of the initiative, while the teacher was pleased with the level of rapport and discussion which eminated and felt that the students would now be more confident in bringing problems to him. While only ten students were involved in this exercise and a good teacher-student working relationship already existed, perhaps the most valuable aspect was that it gave the teacher confidence to try the procedure with other groups.

The second year group were very keen to participate in the exercise, having heard about it from their colleagues. The schedule was modified to include an additional question which, because of timing and reprographic problems, had to be written on the blackboard. This question read, "Has the course to date been relevant to your recent industrial experience?" and was included because the teacher felt some concern that the theoretical teaching input had insufficient relationship with what he saw as the more fundamental industrial

experience aspect of the course. The results did not support this concern and, overall, were very favourable. The procedure was somewhat atypical in this instance; the schedule was administered by the teacher who explained its purpose to the student group. Collection was undertaken by a volunteer student who placed the questionnaires in an envelope and handed it to me at the end of the class. I then discussed the exercise with the group, who appreciated the element of consultation and the resulting feeling of involvement in the course.

The third year group were surveyed some four months prior to the end of their course with the same schedule as that given to the second year group. They were more wary of the exercise and some resented the loss of teaching time and could see little benefit to themselves in the exercise. However, they all co-operated and subsequently reacted in a more positive manner. Their responses reflected this more negative perception of the exercise, and were more cautiously favourable than the two previous initiatives. The teacher was somewhat disappointed at the level of student response. He suggested that, as he knew the group fairly well, the exercise was a mistake and, so late in the course, could not contribute much to improved staff-student communication.

Subsequent work in the same department saw little modification of the schedules or procedures. Two junior members of the department were involved with the remaining six exercises and both had, independently, expressed an interest in "Communication about Communication"; indeed, one of them had already evaluated one class by writing questions from the Lecture Evaluation Schedule on the blackboard and asking students to write their answers on paper. Questions for part-time courses were slightly re-worded to relate the course to current employment rather than anticipated employment. The exercises were all well received by students; indeed, a group of part-time, mature students expressed considerable surprise at being consulted at all.

The case studies in this department were all within the general expectations which had been formulated for the project with the schedules modified somewhat, being used to gain information and facilitate discussion. This was also true of a number of other exercises. For example, a teacher of European origin in a technological department, wished to obtain information on his lecturing style and utilised the Lecture Evaluation Schedule without alteration. He sought to evaluate

Table I8

LECTURE EVALUATION SCHEDULE — CASE STUDY 4

Course

No.of replies: 32

Instructions similar to those in Case Study I.

	a	b	c	d
1. How useful are my lectures in helping you to achieve the course objectives? a = usually useful b = sometimes useful, sometimes not c = rarely useful d = can't answer	19	7	2	4
2. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer	2	11	18	1
3. How do you rate my use of aids - blackboard, projectors etc? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	21	10	1	-
4. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer	17	12	0	3
5. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer	4	23	4	1

6. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these lectures?

Table I9

LECTURE EVALUATION SCHEDULE — CASE STUDY 5

Course

No. of replies: 26

Instructions similar to those in Case Study I.

	a	b	c	d
1. How useful are my lectutes in helping you to achieve the course objectives? a = usually useful b = sometimes useful sometimes not c = rarely useful d = can't answer	10	9	0	1
2. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer	4	13	8	1
3. How do you rate my use of aids - blackboard, projectors etc? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	20	5	-	1
4. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer	23	3	-	-
5. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer	11	15	-	-

6. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these lectures?

Table 20

LECTURE EVALUATION SCHEDULE	CASE STUDY 6 Course	20 No. of replies
Instructions similar to those in Case Study 1.		
1. How useful are my lectures in helping you to achieve the course objectives? a = usually useful b = sometimes useful sometimes not c = rarely useful d = can't answer	a b c d 15 5 – –	
2. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy, sometimes not c = often difficult to follow d = can't answer	a b c d 3 10 7 –	
3. How do you rate my use of aids - blackboard, projectors etc? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	a b c d 3 13 4 –	
4. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer	a b c d 19 1 – –	
5. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer	a b c d 6 10 4 –	
6. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these lectures?		

the three college-based years of a sandwich degree course and I administered the schedule to his classes of 32, 26 and 20 students at the end of the lectures. The teacher was concerned that his accent would act as a barrier to communication; as the results show in Case Studies 4-6, this decreased markedly from first to fourth years. The teacher appeared very satisfied with the results of the procedure. He took the critical elements of the evaluation very seriously, and discussed the issues in greater detail with the students. I was present during these discussions. The level was constructive and mature, with the students elaborating on points and issues raised in the questionnaire and the teacher was able to react and explain his attitude to the points.

The Lecture Evaluation Schedule was also used, unchanged, by a teacher in the human sciences with a long-standing interest in teaching and learning. His main interest was in the mechanics of teaching for which, he argued, the Lecture Evalation Schedule was appropriate. Indeed, prior to contacting me, he had intended to undertake the survey himself but, having reproduced the schedule, decided to invite me to undertake the administration so as to ensure confidentiality. I did this with students in the second year of a degree course, at the end of a morning session, explaining the purpose of the exercise. The schedules were collected again in the afternoon; 56 returns from a total enrollment of 65 were received. The general attitude of the student group was difficult to determine; there was an element of apathy; some hostility, with three students refusing to co-operate; and also more positive comments. The results of the exercise were uniformly favourable; this somewhat disappointed the teacher, who was concerned that something about his lecturing was "not quite right". The exercise failed to identify his concerns or assumed weaknesses as a teacher. However, the seeds of a new rapport were established which, according to subsequent discussion with the teacher, enabled more substantive discussion about teaching processes and learning to be undertaken with the group.

The impetus for use of "Communication about Communication", which has been outlined in the previous case studies, is characterised by the concern of senior staff for their own teaching and that of their colleagues. Very different was the exercise undertaken with a new member of staff in a technological subject area. Upon arrival, he was given a servicing course to teach, a one-year, sub-degree, professional qualification; successful completion entitles transfer to deg-

Table 2I

LECTURE EVALUATION SCHEDULE

56

CASE STUDY 7

	No. of replies			
Instructions similar to those in Case Study I.				
1. How useful are my lectures in helping you to achieve the course objectives? a = usually useful b = sometimes useful sometimes not c = rarely useful d = can't answer	a 50	b 4	c 0	d 2
2. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	a 42	b 14	c 0	d 0
3. How do you rate my use of aids - blackboard, projectors etc? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	a 38	b 14	c 4	d 0
4. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer	a 26	b 22	c 6	d 2
5. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer	a 34	b 20	c 2	d 0
6. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these lectures?				

ree but the course is seen by many students as an end in itself. The teacher had no say regarding the course content and was wary of clashing with the "parent" department, with whom he had already disagreed. Consequently, he was concerned to avoid any implied criticism of colleagues.

The teacher contacted me some two months after the distribution of the booklet. He had already administered the Lecture Evaluation Schedule, without alteration, but had found it unsatisfactory in some respects. He wanted a fairly broad perspective on the course as a whole, but was restricted in this because this may have impinged on colleague's work. We eventually settled on an adaptation and extension of the Lecture Evaluation Schedule, with considerable emphasis placed on the project element of the course (Case Study 8). I administered the schedule in class and was able to discuss it with the group. Having previously completed a similar form, some of the students were dubious of the value of repeating the exercise. The reasons for the re-run were explained and they co-operated fully. The results were, generally, favourable and the teacher was satisfied with the procedure. However, he felt that the exercise would be more useful run solely by himself, rather than with outside assistance. This was the model he intended to use, subsequently. As he intended to undertake regular course review combined with closer rapport with the group. This approach does not conflict with the promotional aims of the project and I welcomed it, as an indication of possible long-term use of the package.

The previous exercise was initiated by a teacher who was concerned about a course which he had not planned. The same is true of the teacher who contacted me fairly early on in the academic year, expressing concern about the practical element of a two-year applied science course, with an enrollment of 27 students. He had recently taken over responsibility for the course and was disturbed at the way it operated, with little association to the parallel lecture course. In previous years, little attempt had been made to indicate to students the purpose of the practical exercises; to overcome this, the teacher prepared a brief statement of objectives for each class, which was discussed and explained before the experiments were started. It was this on-going procedure which he wished to monitor as well as student perceptions of how the laboratory classes associated with the lecture sessions.

The questionnaire which we developed was not based directly on

Table 22

LECTURE EVALUATION SCHEDULE CASE STUDY 8

Instructions similar to those in Case Study I.

	a	b	c	d	e
1. What are your aims and objectives in undertaking this course? a = to qualify for a degree course (full-time) b = to obtain a qualification for a career c = to qualify for a part-time degree course in the future d = to enable me to secure a job e = none of these (specify your reasons over)	3	24	3	1	-
2. How useful are my lectures in helping you to achieve these aims and objectives? a = usually useful b = sometimes useful, sometimes not c = rarely useful d = can't answer	21	10	-	-	
3. How do you find my speaking style in lectures? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	22	9	-	-	
4. How do you rate my use of aids - blackboard, projectors etc? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	24	5	?	-	
5. Do I give appropriate opportunity for student participation in my lectures? a = usually b = sometimes c = rarely d = can't answer	10	18	?	1	
6. Is the pace of my presentation right for you? a = usually b = sometimes c = rarely d = can't answer	22	8	1	-	
7. How useful do you find the project work in general? a = very useful b = sometimes useful sometimes not c = rarely useful d = can't answer	11	20	-	-	
8. How useful do you find the construction technology project work? a = very useful b = sometimes useful sometimes not c = rarely useful d = can't answer	13	16	0	2	
9. Have you any other comments about the course which may help me to be more effective in my teaching? (Continue over)					

any contained in "Communication about Communication, although a similar one had, earlier, been drafted and omitted from the final version. It was designed for repeated use, after each practical session, and the procedure was that students would return the slips with their note-books in which each experiment was written up, ensuring that the two were kept separate when handed in. It was hoped that the instrument would take no more than five minutes to complete. It would not be appropriate to include details of individual exercises here; they are too numerous, repetitious and the procedure soon became the responsibility of the teacher and I had little access to the work. The schedule included questions on the availability of equipment and whether it operated satisfactorarily; the extent of student understanding of objectives as specified and their relationship to the lecture course; the time taken to complete both the experiment and the write up.

The responses were counted and appraised in relation to each experiment by the teacher, although I did assist in the early runs and discussed the procedure with some of the students. Their reactions were generally positive and appeared keen to participate in the exercise when its purpose was explained. The teacher was very satisfied with the procedure and expressed the intention of maintaining its use. He felt that the combination of pre-experimental discussion and post-experiment feed-back enabled him to establish a much more effective working relationship with his students.

"Communication about Communication" was not designed, exclusively, for use by individual teachers; it was deemed to be appropriate for course teams or teachers involved in team-teaching as well. The latter context is exemplified by evaluations undertaken with both years of a professional training course. The two teachers responsible for a particular element of the course, approached me late in the academic year, as a result of mounting concern with the relatively informal teaching approach they had adopted. A Course Evaluation Schedule was developed from the Course Effectiveness and Lecture Evaluation Schedules and included reference to the particular teaching strategies which, the teachers felt, were not entirely successful. In the case of the first-year group, I administered the schedule to the group, who were all provided with copies of the report. The exercise with the second year was undertaken at the final course meeting and the students were asked to return the schedules in an addressed envelope, through the internal mail. A total

Table 23

COURSE EVALUATION SCHEDULE CASE STUDY I0 N = 32

This questionnaire seeks information about the above course of study. Please answer as frankly as you can. Do not write your name on the sheet. Write the letter which represents the option nearest to your present opinion in the appropriate box. Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

		a	b	c	d	e
1. How useful are our sessions in helping you to achieve the course objectives? a = usually useful b = sometimes useful sometimes not c = rarely useful d = can't answer	1	8	19	5		
2. How do you rate the various elements of the course as learning experiences which are worthwhile to you? (the person issuing the questionnaire will identify the elements using the codes 2A to 2J). a = very worthwhile b = worthwhile c = hardly worthwhile d = worthless e = can't answer	2A	8	9	13		2
	2B	3	22	3	1	3
	2C	2	15	10	2	3
	2D	5	8	13	3	3
2A Role-play exercise 2B Lecturing 2C Written exercises 2D Interview exercises 2E Video tape sessions 2F Team teaching situations	2E	10	19	2	1	
	2F	4	14	5	1	8
3. How do you find our speaking styles in the sessions? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	3	20	12			
4. How do you rate our use of aids - blackboard etc? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	4	13	14	4	1	
5. Is there appropriate opportunity for student participation in the sessions? a = usually b = sometimes c = rarely d = can't answer	5	22	8	2		
6. Is the pace of presentation right for you? a = usually b = sometimes c = rarely d = can't answer	6	19	7	5	1	

7. Have you any other comments which would be of help to us on the course?

For responses to question 7 see below

1. I feel too much is being included in these sessions, which means that each activity has to be rushed. Perhaps it would be better to have lectures only some weeks and devote other weeks solely to group exercises.
2. Perhaps working in a smaller lecture group would make participation for some easier.
3. In preparation for seminars perhaps each topic ought to be learned by everyone and less talk should come from the lecturer: i.e. he/she should be a chiarman.
4. I feel this sequence could be better presented by seminar.
5. Perhaps we could learn more about the theory of interviewing before role play is used.
6. Course seems very basic.
7. Found the course of very little value.
8. With regard to question 6, I feel that the presentation could be paced much faster. Maybe the size of our course is prohibitive with regard to student participation.
9. More use could be made of tapes (visual aids) in learning about different methods.

Table 24

COURSE EVALUATION SCHEDULE: CASE STUDY 10 b N = 26

This questionnaire seeks information about the above course of study. Please answer as frankly as you can. Do not write your name on the sheet. Write the letter which represents the option nearest to your present opinion in the appropriate box. Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

		a	b	c	d	e
1. How useful were our sessions in helping you to achieve the course objectives? a = usually useful b = sometimes useful sometimes not c = rarely useful d = can't answer	1	8	14	3	1	
2. How do you rate the various elements of the course as learning experiences which were worthwhile to you? (the person issuing the questionnaire will identify the elements using the codes 2A to 2J). 2A Role-play exercises 2B Lecturing 2C Written exercises 2D Interview exercises 2E Video tape sessions 2F Team teaching situations	2A	7	5	11	3	0
	2B	8	13	4	0	1
	2C	1	9	15	1	0
	2D	3	9	11	1	2
	2E	9	12	3	0	2
	2F	8	14	2	1	1
		a	b	c	d	
3. How did you find our speaking styles in the sessions? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	3	18	6	-	-	
4. How did you rate our use of aids - blackboard etc? a = usually easy to follow b = sometimes easy sometimes not c = often difficult to follow d = can't answer	4	12	12	2	0	
5. Was there appropriate opportunity for student participation in the sessions? a = usually b = sometimes c = rarely d = can't answer	5	24	2	0	0	
6. Was the pace of presentation right for you? a = usually b = sometimes c = rarely d = can't answer	6	10	8	6	2	
7. Have you any other comments which would be of help to us on the course in future years?						
8. In retrospect, how would you rate the course? a = very worthwhile b = worthwhile c = hardly worthdhile d = worthless e = can't answer		2	10	8	6	0

of 35 schedules were handed out and 26 returned, some by external post. While one of these exercises is representative of formative evaluation, the latter is closer to the summative approach, frequently adopted in student evaluation exercises. Both produced relatively mixed results, as had been anticipated, with some of the teaching strategies rated poorly. This did not surprise the teachers- "That's why we wanted it done", was the response. The results were discussed in detail with the students and the two teacher were confident that they could implement a number of teaching and content changes to improve the course.

A larger-scale course review, involving a large number of staff, was undertaken with a multi-disciplinary honours degree programme. On this course, students choose from a variety of options, while also taking a number of compulsory core components. The course "straddles" various departments in the Polytechnic. All three years of the course were consulted, with returns of 47 from 64 for the first year, 43 out of 59 for the second year and 32 out of 56 for the final year.

The course in question was undergoing review, with a re-submission to the Council for Academic Awards, pending. Implementation followed an approach to the Dean of the school, who was fairly keen to co-operate. He made contact with the course leader, who organised a general meeting for staff concerned. I outlined the purpose of the exercise to 15 of the 25 staff involved in all three years of the course; this was to give them feed-back on the course in general and to provide information for the re-submission, for their own use and not for presentation to CNAA. Reaction, at this meeting, was very mixed, with some teachers openly hostile, while others were keen to co-operate. The initial step was to consist of a blanket evaluation of each year, based on the Course Effectiveness Questionnaire. The intention was that more specific instruments could be used for individual units at a later date.

It was decided to use the same instrument for all three years of the course. Much of the meeting with staff, once the principle had been agreed, was devoted to discussing the content of the questionnaire to be used and the procedure for administration, appropriate for each year. Various proposals for changes to the Course Effectiveness Questionnaire were put forward; I noted these down and drafted an instrument which was sent to all teachers involved; this was accepted. Procedure differed between the three years, reflecting the structure of the course. I administered the schedule to the first year students

Table 25

Case Study II Year 1 N = 47

COURSE EFFECTIVENESS QUESTIONNAIRE

This questionnaire seeks information about your present course of study. Please answer **as frankly as you can. Do** not write your name on the sheet. **Write the letter which represents the option nearest to your present opinion in the appropriate box.** Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

1. To what extent have you been made aware of the aims of the course?
   a= fully b= to some extent c= hardly
   d= not at all e= can't answer

   Responses: a b c d e
   11 21 9 3 3

2. **How do you rate the various elements of your course as learning experiences which are worthwhile to you?**

   a = very worthwhile b = worthwhile c = hardly worthwhile
   d = worthless e = can't answer f= do not take option

   Option A
   Option B
   Option C
   Option D
   Option E
   Option F
   Option G
   Option H

   The identification of options would breach confidentiality and the results of the evaluation are of little meaning without identification.

3. **What do you estimate to be your average workload per week at the present time? Include all activities which are intended to promote your learning, ie lectures, tutorials, seminars, practicals, professional placements, as well as reading, essay writing and other forms of private study.**
   a = less than 30 hours per week b = 30-35 hours c = 36-40 hours
   d = more than 40 hours e = can't answer

   a b c d e
   4 31 6 1 5

4. **Do you consider that your workload is:**
   a = excessive b = rather too much c = about right d = too little
   e = can't answer

   a b c d e
   2 7 33 1 4

5. To what extent do you find the present balance between contact classes and individual study time satisfactory?
   a= too much class contact time b= about the right balance
   c= too little class contact time d= can't answer

   a b c d
   3 17 22 5

6. **To what extent are you satisfied with your course?**
   a = very satisfied b = satisfied c = dissatisfied d = very dissatisfied
   e = can't answer

   a b c d e
   18 21 7 1 0

7. To what extent do you think the course units comprise a coherent and logical course?
   a= very coherent and logical b= reasonably coherent and logical
   c= lacks coherence and logic d= can't answer

   a b c d
   7 17 11 12

8. To what extent are you satisfied with the personal tutor system?
   a= very satisfied b= satisfied c= dissatisfied
   d= very dissatisfied e= can't answer

   a b c d e
   21 18 3 0 5

Table 26

Case Study II — Year 2 — N = 43

COURSE EFFECTIVENESS QUESTIONNAIRE

This questionnaire seeks information about your present course of study. Please answer as frankly as you can. Do not write your name on the sheet. Write the letter which represents the option nearest to your present opinion in the appropriate box. Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

	Responses a b c d e
1. To what extent have you been made aware of the aims of the course? a= fully b= to some extent c= hardly d= not at all e= can't answer	18 15 8 2 0
2. How do you rate the various elements of your course as learning experiences which are worthwhile to you? a = very worthwhile b = worthwhile c = hardly worthwhile d = worthless e = can't answer f= do not take option	
Option A	
Option B	
Option C	
Option D	
Option E	
Option F	
Option G	
Option H	
The identification of options would breach confidentiality and the results of the evaluation are of little meaning without identification.	
3. What do you estimate to be your average workload per week at the present time? Include all activities which are intended to promote your learning, ie lectures, tutorials, seminars, practicals, professional placements, as well as reading, essay writing and other forms of private study. a = less than 30 hours per week b = 30-35 hours c = 36-40 hours d = more than 40 hours e = can't answer	3 19 10 2 9
4. Do you consider that your workload is: a = excessive b = rather too much c = about right d = too little e = can't answer	3 9 26 1 4
5. To what extent do you find the present balance between contact classes and individual study time satisfactory? a= too much class contact time b= about the right balance c= too little class contact time d= can't answer	1 17 20 5
6. To what extent are you satisfied with your course? a = very satisfied b = satisfied c = dissatisfied d = very dissatisfied e = can't answer	11 19 4 2 7
7. To what extent do you think the course units comprise a coherent and logical course? a= very coherent and logical b= reasonably coherent and logical c= lacks coherence and logic d= can't answer	5 11 19 8
8. To what extent are you satisfied with the personal tutor system? a= very satisfied b= satisfied c= dissatisfied d= very dissatisfied e= can't answer	17 15 3 1 7

Table 27

Case Study II Year 3 N = 32

COURSE EFFECTIVENESS QUESTIONNAIRE

This questionnaire seeks information about your present course of study. Please answer as frankly as you can. Do not write your name on the sheet. Write the letter which represents the option nearest to your present opinion in the appropriate box. Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

	Responses
1. To what extent have you been made aware of the aims of the course? a= fully b= to some extent c= hardly d= not at all e= can't answer	a b c d e 15 14 1 1 1
2. **How do you rate the various elements of your course as learning experiences which are worthwhile to you?** **a = very worthwhile b = worthwhile c = hardly worthwhile** **d = worthless e = can't answer f = do not take option**	
Option A Option B Option C Option D Option E Option F Option G Option H The identification of options would breach confidentiality and the results of the evaluation are of little meaning without identification.	
3. **What do you estimate to be your average workload per week at the present time? Include all activities which are intended to promote your learning, ie lectures, tutorials, seminars, practicals, professional placements, as well as reading, essay writing and other forms of private study.** **a = less than 30 hours per week b = 30-35 hours c = 36-40 hours** **d = more than 40 hours e = can't answer**	a b c d e 1 11 18 2 0
4. **Do you consider that your workload is:** **a = excessive b = rather too much c = about right d = too little** **e = can't answer**	a b c d e 3 8 19 1 1
5. To what extent do you find the present balance between contact classes and individual study time satisfactory? a= too much class contact time b= about the right balance c= too little class contact time d= can't answer	a b c d 7 7 16 2
6. **To what extent are you satisfied with your course?** **a = very satisfied b = satisfied c = dissatisfied d = very dissatisfied** **e = can't answer**	a b c d e 4 15 8 2 3
7. To what extent do you think the course units comprise a coherent and logical course? a= very coherent and logical b= reasonably coherent and logical c= lacks coherence and logic d= can't answer	a b c d 7 16 4 5
8. To what extent are you satisfied with the personal tutor system? a= very satisfied b= satisfied c= dissatisfied d= very dissatisfied e= can't answer	a b c d e 9 14 3 0 6

at the end of a "core" unit class, explaining the purpose at the time. I collected returns and provided results within a few days. The questionnaire was given to second year students during nine seminar sessions, collected and returned to me in a sealed envelope. The third year of the course did not meet together as a group; furthermore, contact time was valued at a premium by these students and co-operation was only forthcoming on condition that the exercise did not impinge on class time. Schedules were handed out by teachers in class, together with an addressed envelope for return to me. This accounts for the relatively poor response-rate of the group.

Those students with whom I made contact were enthusiastic about participation, having never experienced this form of consultation before. Some concern was expressed at the general nature of the schedule, but the additional stages which were envisaged for further investigation were explained. Students wished for a facility on the questionnaire to elaborate on certain points; this had been deliberately omitted at the request of the majority of the teachers at the planning meeting.

The exercise produced a remarkably consistent assessment between the three years. It was generally favourable but not over-laudatory, and in all cases included a significant dissenting minority. The course appears to be satisfying the expectations of most students while a proportion remain dissatisfied, or at least, did so at the time of survey. Of particular note is the proportion wishing greater time-tabled contact time (Question 5). The course is deliberately designed to avoid high contact time, leaving students free for independent study. The reaction of staff was generally favourable to the exercise, and even those who were originally sceptical, admitted that it was useful. Reaction to second year ratings included more concern than in the case of the first year, because there was an assumption that, by this stage of the course, some "shape and coherence" would be evident to the students; this was not borne out from the assessment. This problem, and similar concerns in relation to the third year, prompted seminar discussion of the issues raised; according to the teachers, this proved a useful "air-clearing" exercise for both sides.

A number of teachers expressed an interest in more detailed investigation of their particular classes. This resulted in follow-up activity in the area of practical work, seminars and assignments,

using modifications of the draft schedules in "Communication about Communication". However, to outline further details would, inevitably, breach confidentiality; it would not be possible to avoid this and at the same time present a meaningful picture of the exercises and, therefore, these examples cannot be expanded.

The final case study relates to a three-day, short course for supervisore of students on professional practice. The course was taught by two teachers. The students were mature, and familiar with the practical environment in which they operate. The purpose of the course was to better equip them as teachers. The course was deliberately activity-based with little formal input from the teachers. The evaluation had the additional purpose of familiarising the students with the processes of evaluation, of which much of their supervision activities would consist. Thus, part of the emphasis was to suggest evaluation criteria of a systematic nature to them so that ad hoc, "off the cuff" judgements might decrease in significance in their evaluations.

Three instruments were used as part of an on-going, evaluatory exercise. The first asked students to identify and give priority to those aspects and attributes of professional practice which they deem most significant. The second was an evaluation of the day's events, designed to assist the teachers in the planning of the next day's activities. The last was a summative evaluation, covering events on the course, and asking students to rate the importance of those attributes and behaviours most frequently mentioned in the replies to the original schedule. Because of confidentiality commitments, it is not possible to include the first or last schedules. The daily instrument is included here.

The course time-table for the three days, with regard to the evaluation, gives the clearest indicataion of how it operated:

Day One

A.M. Administration of initial schedule by teachers. Collection and summary prepared by T.Baum

P.M. Administration of day evaluation by teachers. Summary prepared by T.Baum.

Day Two

A.M. Results of previous day summary discussed; day two schedule outlined.

P.M. Day two schedule administered by teachers and summary prepared by T.Baum.

Table 28

CASE STUDY I2

DAY EVALUATTON

It will be useful, in finalising details of tomorrow's work, to obtain some information about your perceptions of today's sessions. Please answer the following questions as frankly as possible. Complete confidentiality is assured.

1. Please indicate which aspects of today's sessions you considered to be of the greatest value. Please give reasons.

2. Please indicate which aspects, if any, were of little or no value to you. Please give reasons.

3. Is there any aspect to which you would like to devote more time tomorrow?

4. Did you find the tutor input during today's sessions to be:
   1. too much
   2. about right
   3. too little
   4. can't answer

5. To what extent did you find the project sessions useful?
   1. very useful
   2. reasonably useful
   3. useless
   4. can't answer

6. Have you any further comments about today's sessions?

Day Three

A.M. Previous day evaluation discussed; final day planned.

P.M. Administration of final evaluation by T.Baum. Extensive discussion of procedure by all three parties.

Subsequently

Copy of final evaluation sent to all students.

With the exception of the final session, I had no contact with the student group. This was resented by the group, who argued that greater involvement by myself would have made the exercise more acceptable and meaningful. By the third day, questionnaire completion had possibly reached an "over-kill" situation and there were a number of complaints about the procedure and the time it demanded. However, the discussion was detailed and valuable and not weakened by these concerns. I found the exercise a labour-intensive one, especially the need to provide a summary of the daily evaluations, which were completed at 5.30 p.m.for perusal and use the next morning. The course was possibly over-evaluated and too much attempted within the framework of a very short period. Whether the educational aims of the exercise were met is difficult to determine; the teachers were satisfied that they were. As an on-going evaluation exercise, it provided useful information for the direction of a flexible and activity based programme. The daily evaluations allowed negotiation and discussion of the next day's programme to take place on the basis of a reasonably objective consensus. The final evaluation provided a more comprehensive assessment which the teachers could utilise for the planning of future courses, although possible drawbacks in this course were pointed out.

Comments

It is evident that, in practice, "Communication about Communication" was used in ways considerably divergent from the draft schedules and practice outlined in the booklet. This can be seen as a positive feature. This may well be the case with many student feed-back projects but, in general, the literature concentrates reports on the majority and conforming cases and not on exceptions. This project was relatively loosely formulated and therefore divergent initiatives were of considerable interest, easy to accomodate and fully encouraged. The case studies show that the teachers on courses to be evaluated would like greater involevement in the aims, strategies and consequences of the exercises than is normal practice; these require-

ments never conflicted with the pragmatic aims of the project, which acknowledged the overall primacy of teacher demands.
The case studies include both individual and team uses of the schedules, derived from "Communication about Communication. They all have in common a commitment to the confidentiality of information to the teacher. The principles which are outlined in the case studies could be applied to a variety of other aspects of teaching and learning; for example, no work was undertaken in the area of teaching materials evaluation- this is covered admirably in a recent book by Nathenson and Henderson.[8I] The success or otherwise of this project must be judged on the basis of information gleaned from these case studies; they are sufficiently different to preclude any general evaluation of their effectiveness.

Chapter Six

TESTS OF VALIDITY AND RELIABILITY

The validity and reliability of survey questionnaires and like-instruments in the social sciences present some of the most acute problems in their development, use and the credible acceptance of their findings. Absolute reliability and absolute validity can never be expected in what is generally a very inexact science. So most undertakings which include survey or other psychometric instruments attempt to achieve as high a degree of statistical validity and reliability during testing and piloting exercises as is possible. However, a considerable error margin must always exist in this respect. This issue in relation to student evaluation of teaching is one of the most frequently aired in debate about the use of such instruments. The urging of caution or the outright condemnation of the use of student opinion are the most frequent manifestations of concerns relating to validity or reliability. Krutzen (1979)[82] argues that a "careful review of the more pertinent literature on SSQs (systematic student questionnaires) shows that they are not reliable, nor valid methods of evaluating teaching effectiveness." The problem, especially with regard to validity, is that this type of blanket condemnation is applied to all student feed-back instruments; what Krutzen clearly failed to appreciate (and this was clear from personal discussion with the author) is that not all such instruments claim to be valid measures of teaching effectiveness. An instrument is only invalid in so far as it is failing to measure what it claims to measure; it is not invalid when it does not measure what critics suppose it is intended for. However, Krutzen's concern has not been generated without some cause. The literature pertaining to the Dr. Fox effect or educational seduction, initiated by the experiment of Naftulin et al (1973)[83] and developed by researchers such as Kaplan (1974)[84], Ware and Williams (1975)[85] and Leventhal et al (1979),[86] certainly cast doubt on the claims of a number of student rating exercises to be measuring teaching effectiveness. However, the problems of validity in these instances seem to relate more to the exaggerated claims of the researchers than to faults in the instruments themselves.

Krutzen's blanket condemnation is not, therefore, generally accepted by many advocates of the value of student evaluation instruments. The work of, for example, Mc Keachie (1971)[87] appears to confirm both the validity and reliability of well-constructed SSQs. This, it is argued, is especially true when the useage of an instrument is seen within the precise context for which it was intended. Thus, in most cases, a general validity is not claimed for instruments designed for use within a particular college, discipline area or educational system. De Winter Hebron's (1979)[88] attempt to transfer the Kansas State University system IDEA for use in the United Kingdom have highlighted the problems of validity transfer between educational systems, which are likely to become more acute when relating to specific institutions. The system is a perception-based rating scheme, tested on a large sample population in the United States. In attempting to transfer IDEA to the United Kingdom situation, it was anticipated that the field trials would show:

i) that the instrument would be a practical one to administer
ii) that questions would need some superficial rewording, but not much other alteration
iii) that U.K. and American scoring and therefore norms would be similar.

However only the first of these was confirmed and even this does not reject the more general reluctance on the part of British academics to use feed-back schemes than their American counterparts. The terminology of the IDEA schedule presented a number of transfer problems, while the norms achieved in the trial run showed virtually no similarity to those obtained in the United States. This latter finding will, of course, reflect the problems of terminology but is not solely a consequence of them. The consequence of these discoveries was that de Winter Hebron was required to develop an entirely new scheme from scratch, but using the rationale and objectives of the American system. AID (Assessment for Instructional Development) was therefore initiated to incorporate the requirements of the British institutional context. Early testing on AID highlighted a further validity problem which is related to the transfer of instruments between institutions and

faculties. The initial stage involved identification of 46 behavioural aims relating to teaching in higher education. These were then rated for importance by a sample of teachers from 7 major discipline areas, humanities, education, art & design, social studies, business studies, engineering and science. The responses were found to be significantly different between disciplines and this suggests that a standard instrument for use"across the board" in higher education would be inappropriate or at least that standardised interpretation would.

If, as de Winter Hebron's experience suggests, student feed-back instruments cannot provide generalised information about the teaching-learning situation and standardisation is not possible, there is, in Krutzen's view, a distinct danger that the resulting "specific" questionnaire will be of a trivial nature and will, consequently, be of little value. Attempts to avoid emphasis on the trivial will result in a meaningless generality which "cannot be defended." The result of this failure to achieve a balance (the possibility of which, Krutzen does not even consider) is that attempts to utilize student opinion as part of the appraisal of teaching are unsatisfactory because the reliability and validity of instruments cannot be established to any realistic degree. He concludes that evidence relating to these issues is "trivial, incomplete, often contradictory." Other researchers dispute this assertion. Knapper (1973),[89] discussing reliability, found that this is generally "high, certainly as high as for most achievement and aptitute tests" and similar arguments are forthcoming with respect to validity.

It is not proposed to engage in a protracted debate about the research evidence relating to the reliability and validity of student feed-back schedules. Such debate will, inevitably, be inconclusive. Furthermore, it would be of only limited saliency in the context of the present project. Suffice to say that there is so much variation between existing instruments and the contexts in which they have been used, that general statements regarding these issues are of little value.

While general information about the reliability and validity of schedules is of little direct value to those designing instruments, using them or interpreting results, this does not imply that careful consideration should not be given to these concerns in relation to any instrument it is proposed to employ. Indeed, where facilities and resources are available, such questionnaires should be no less thoroughly tested for reliability and validity than any other educational or psychological schedule. In many cases, this is indeed what pertains. Large-scale ventures in the United Kingdom, such as that at the North-East London Polytechnic,[90] have undertaken fairly extensive validation procedures while some of the very large American schemes, for example IDEA, have initiated testing programmes with "norms" established on the basis of results from over 2 million respondents.

However, the modus operandi of the present project was such that conventional testing procedures for reliability and validity were both impractical and inappropriate. The schedules which were developed as a result of the examples contained in "Communication about Communication," are generally far removed from large-scale endeavours such as IDEA. They have much more in common with the type of schedule which constitutes the most frequent example of the use of student feedback questionnaires, namely those devised by teachers to suit their own specific needs on a course. They may or may not use or adapt one of the instruments validated on a large scale but more frequently the schedule is constructed by commonsense and intuition, listing a series of pertinent questions to suit the circumstances. These are then typed up, reproduced on a banda or Xerox machine and given to students without any piloting or other pre-administration tests being undertaken. Indeed, to attempt meaningful, research-type validation of such instruments would be beyond both the resources and inclination of a busy teacher seeking rapid feed-back on his work.

It is the promotion and improvement of this type of feed-back exercise which has been one of the main concerns of the present project. This is the central aim of "Communication about Communication". In view of the economic and political barriers to larger-scale initiatives, it would seem to be a fair assumption that this kind of small-scale programme will continue to operate extensively in higher education.

There are also strong educational reasons, some of which under-lie this project, for using this approach to the collection of feed-back information rather than larger, possible centrally controlled, initiatives. This prospect, combined with the need to prepare some validation of the instruments which were used in conjunction with the present project, led to a detailed consideration of means by which teachers can avoid some of the pitfalls with regard to realia-bility and validity. Clearly, conventional research techniques, involving extensive pilot testing with a large sample, are not appropriate for the teacher-designed instrument which is intended for limited use with a particular group or a small number of groups of students. The result of this concern was the development of four simple procedures which teachers can initiate to ensure that the instruments they propose to use have reasonable validity within the course and institutional context for which they are designed.
The quasi-phenomenological basis of this project is such that feed-back exercises are seen clearly as indicatory of how things are going on a course at the time of administration alone and cannot be usefully seen as a wider-embracing evaluation of the course, with application beyond the immediate situation. They are not intended to be of a summative nature; rather they are formative in assisting teachers to assess the state of play on a course and act in response as they sees fit. Consequently, the concept of reliability does not have an important bearing on the thinking behind the project. The re libility of an instrument is taken to be the likelihood that it will reproduce similar results on re-test as it did in the original run, obtained either through two "runs" with the same population, separated by a reasonable period of time or through split-half techniques. The present project assumes as a basic tenet that the failure of a feed-back instrument to satisfy a test-retest or other reliability test is not necessarily a reflection on the schedule but is likely to be indicative of the volatile attributes of the groups in question. Likewise, a split-half test would not be practicable in the context of the size and circumstances of the student groups involved with the project. In other words, the student groups and the overall course context is constantly amenable to flux in a manner

that is likely to render a reliability test meaningless. The practical problems are also likely to detract from the use of such tests with other small-scale initiatives unconnected to this work. The consequence of this situation is that the testing procedures evolved as part of this project concentrate exclusively on the validity of the instruments; validity regarded to mean the extent to which an instrument measures what it is intended to measure. The problem regarding psychometric tests in general is that it is not always clear what exactly is to be measured; certainly this has presented considerable problems in the United States with regard to instruments designed to evaluate teaching performance and has generated extensive debate as to what criteria can be established for good or effective teaching. This is a problem with regard to all student feedback instruments. Is the schedule attempting to measure effectiveness, student morale, teacher popularity or a combination of all these and other aspects in indeterminate proportions? It is not always clear what exactly is being measured and this must necessarily put claims for validity into question. This issue is not of paramount importance in the context of the present project. The instruments were not designed with measurement in mind although an element of this cannot be avoided. Primarily, they are communication facilitators and indicators of student morale in a very general sense.

Tests of validity at a "commonsense" level are certainly appropriate with respect to the schedules exemplified in "Communication about Communication". The avoidance of problems of, for example, ambiguity or misunderstanding is paramount in the design of any questionnaire. Failure to do so will seriously impair the validity of an instrument. If the student respondents interpret a question which they are required to answer in significantly different ways from the intended or, alternatively, there is considerable divergence in interpretation within the student group, both the value and the validity of the responses obtained will be limited. It is this aspect of validity which the simple tests outlined below have been designed to identify. They are intended to be very simple to initiate, brief to implement, easy to interpret and are intended to avoid, as far as is possible, interference with the target population for the investigation.

i) This test of validity requires the teacher to select a small number of students, which should be a reasonably representative sample of the population (or class) from which they are drawn. The teacher then discusses each question in detail with the group so as to ascertain their perceptions of the actual meaning of the questions and to identify any other problems which may arise during the completion of the schedule. This approach is frequently adopted during general instrument validation procedures. It was used extensively by Clarke (1978)[91] during the validation of his student feedback schedule. It was also used in a large proportion of the case studies relating to this project, although this was frequently undertaken post-administration with the target group. Where the administration was undertaken by the researcher, it was standard practice to discuss the procedure with the student group and to obtain feedback in some detail on the instrument itself. The first step was to elicite opinion in general terms about attitudes towards the use of student feedback as an aid to teaching and, more specifically, as a communication facilitator between students and their teacher. The intentions of the exercise were always made clear. This was followed by more detailed enquiries about the actual questions included in the schedule, any problems which may have arisen during completion and any difficulties which, for example, layout may have presented. Where the researcher was not involved with administration, the teacher was none-the-less encouraged to undertake such discussion with students. This was seen to be of benefit both within the context of facilitating communication as well as assisting in the identification of problems within the instrument.

In practice, this approach differs from the one above in the use of the target group to vet the instrument. It has the distinct disadvantage of precluding alterations to the instrument in the case of a "one-off" exercise, although if the intention is to use a similar instrument with a number of similar groups, this problem is not so acute. When dealing with a small group of respondents, it may not be desirable to undertake prior testing with that group. This can be overcome, to some extent, by testing with a similar

Table 29

Examples of question re-definition.

Q.1. How useful are my lectures in helping you to pass the examination?

1. Are the lectures necessary to pass the exams?
2. Are my lectures relevant with regard to passing exams?
3. Are the lectures relevant to the course, examinations and to be of use in later life?
4. Are the lectures necessary for the passing of exams?
5. Will my lectures help you with the exams?
6. Are my lectures relevant to the exam questions?
7. Will the lectures help you to pass the examination?
8. Do we need to attend lectures to pass exams?
9. Is the lecturer's material relevant to the exam?

(Comment: There is relative uniformity in the responses to this question. The emphasis, however, does show some disparity even with regard to a seemingly simple question).

Q.2. How relevant do you think my lectures will be to work in your intended career?

1. Do my lectures apply to the practical aspects of your career?
2. Will my lectures be of any use to you in your working career or are they just excess knowledge?
3. Will the lectures be useful in the future?
4. Do lectures cover practical topics?
5. Are the lectures relevant to the subject, and your career?
6. Will my lectures help in industrial work?
7. Will you use the information given in a lecture in your future work?
8. Is the information given in lectures only useful for passing exams or is it of use in the career in which you will be following?

Q.3. How do you find my speaking style in lectures?

1. Can you understand me?
2. Can you understand me when I'm speaking?
3. Do I speak clearly?
4. How do I talk?

5. Do I speak clearly in class?
6. How efficiently do I communicate in class?
7. Do I make myself clear during the lectures?
8. Do I repeat myself, have accent, or speak to quickly?

Q.4. How do you rate my use of aids - blackboard, projectors etc?

1. Do I use all the aids necessary to explain my lecture properly?
2. Are my aids actually an aid or do they just confuse the issue?
3. Do I use the blackboard, diagram etc., enough?
4. Can lectures be made more interesting?
5. Are the teaching aids useful and easily followed?
6. How do I use visual aids in my lectures?
7. Can you read my writing and / or understand my diagram?

Q.5. Do I give appropriate opportunity for student participation in my lectures?

1. Do I give students the chance to ask questions?
2. Are the lectures just one sided?
3. Can we question the lecturer?
4. Do I practice student participation?
5. Do I allow students the time to speak?
6. Do I allow students to stop and ask questions?
7. Does the lecturer allow us to make contributions to the lecture and if so, does he encourage it?

Q.6. Is the pace of my presentation right for you?

1. Do I talk too fast?
2. Can you keep up with the pace I set?
3. Is dictation too fast?
4. Is the presentation pace correct?
5. Do I teach at the right pace?
6. Do I speak too quickly or too slowly?
7. When giving dictation, does he go too fast or too slow?

Q.7. Has the course to date been relevant to your recent industrial experience?

1. Is the subject useful in industry?
2. Was the material useful preparation to the industrial placement?
3. Did you use my lectures when working?
4. Was what the lecturer taught any use in practice?
5. Was the subject matter related to the work?
6. Did you use the lecture material when on industrial placements?

Additional comments from students;

A number of students added "useful question" to some of the re-definitions. One student commented on layout which "could have been clearer" while another did not participate in the exercise because "the questions are so obvious, anyway".

group although this can never be entirely satisfactory. If the intended group is large, prior discussion with a small number of them may well be justified. This could be undertaken with a personal seminar group. Even if changes cannot be made to the instrument because discussion is undertaken post-administration, the procedure may enable the teacher to identify "suspect" questions which will require more caution when results and responses are interpreted.

ii) The second procedure requires students to undertake a brief exercise in addition to completing the schedule during its initial run. At the same time as responding to each item in the questionnaire, the students are requested to rewrite the original question in their own words on a separate sheet which is provided. As well as this, they are asked to note down any other problems with the instrument which they may encounter. This procedure suffers from the same problems as that dependant on discussion in that changes are not possible if the exercise is undertaken with the target group. It is, however, a fairly effective and systematic approach to the identification of ambiguities and other problems with questions and is very useful when the same or a similar instrument is to be used more than once. For example, the schedules utilized in some of the case studies were very similar in content and structure; no major alterations were undertaken and this was the result of the successful implementation of this procedure. Table 29 give examples of the responses obtained. Some care is necessary when explaining the intention of the exercise to the student group; failure to do so may well lead students to attempt to answer the question in more detail rather than undertaking the required task.

The table shows the relatively consistent responses to the question rephrasing. The questions are simple and therefore this result could be anticipated. A useful "rule of thumb" when using this procedure relates to the length of the redefinition which students produce. Where this is consistently markedly longer than the original, it is a reasonable assumption that an element of ambiguity or complication is present. The more consise the response, the clearer the question is likely to have been to the students. The implication of this "rule of thumb" is that there may be justification in Krutzen's claim that a valid schedule will, inevitably, be a trivial one. Perhaps what it really does is to pinpoint the limitations of such instruments for uses of a more generalised nature than is intended in this project.

iii) The third procedure involves the selection of a small group of students for testing purposes. The group is divided into pairs and one of each pair is required to complete the schedule. He is requested

to do so aloud, verbalising his thoughts and reactions as he answers each question. Thus he reads each item aloud, including the instructions, selects his answers, notes any problems he may encounter and finally comments on the general usefulness or otherwise of the question. He may begin by rephrasing the question, make disparaging comments about it and verbalise his reasons for answering in the manner he does. The second member of the pair, in the meantime, is required to act as scribe, noting down the most important features of his partner's "continuous stream of consciousness" so that the main problems with the instrument can be identified by the teacher through a perusal of the notes. This procedure has been used as part of a workshop exercise on questionnaire design and, as such, is a useful training activity to pinpoint some of the problems which may arise in devising schedules. When employed, the procedure has evoked sceptical comments when first explained but its value has been usually acknowledged once some of the pitfalls and problems in the schedule have been identified through its use.

iv) The fourth procedure is similar to the one described above. However, instead of employing a student scribe, the responding student is required to record on tape his verbalised reactions to the questions. The use of a language laboratory may be helpful in this as was demonstrated in case study XV. The teacher does not need to attempt a lengthy transcription of the tapes but can listen to each, noting any salient points raised by students. The method is more time consuming than the previous one but ensures that no important points are missed.

The four simple procedures do not provide a substitute for comprehensive validation and testing of instruments where this is possible. They all suffer from methodological weaknesses but have the virtue of providing the busy teacher with a simple and easily manageable validation so that some of the more serious flaws in the instrument can be identified. Clearly these are not the only options open to enable this to be undertaken for example, discussion with colleagues can prove useful. These procedures have been tested with reasonable success as part of the present project and, as such, are certainly worth testing elsewhere.

Chapter Seven

A SURVEY OF STAFF OPINION

Teaching improvement, facilitation of more effective staff-student communication and staff development in its most general sense have widespread support at a theoretical level among teachers in tertiary education in this country. Activity in this area is seen as desirable but in practical terms becomes a fairly low priorty for action, not least because rewards in terms of promotion etc., rarely take into account concern for activity of this kind. A recent survey at Trent Polytechnic (Fox 1978),[92] asked lecturers to identify in order of importance their various professional activities such as research, consultancy, teaching and administration. Teaching was seen to be the most important by a considerable majority of the sample. When asked, however, in which area they would most appreciate staff development assistance and advice, teaching was allocated the lowest priority. This apparent contradication is at the root of many of the problems in general staff development in this country and likewise affects the success of research endeavours such as the present project.

It is at the propaganda level that the general pedagogic movement, of which this project can claim to be part, faces its main barriers. The tradition of academic independence and insularity which characterises higher education in this country results in a hostility to any suggestion of impinging upon the sanctity of the classroom. This is an area by and large unresearched and one that merits investigation at a sociological and psychological level. Why, in the face of seemingly conclusive research evidence, do teachers fail to adopt apparently more effective teaching and instructional strategies than those they currently operate? It is not through a lack of available information. There would seem to be some attitudinal imponderable which acts as a barrier to logical behaviour.

Staff reaction to the present project was very mixed. Where co-operation was forthcoming, it involved a high level of commitment and enthusiasm. Outright hostility was limited but was in evidence from a number of teachers who showed genuine concern at the principles of student involvement in discussions about teaching and in any procedures which might threaten their professional insularity. The majority feeling, however took the form of apathy and disinterest which was the more difficult, indeed it was the most difficult, and almost impossible to counter. In part, it was polite disinterest, disguised by claims of overwork or

various other excuses, possibly quite justified. Generally, however, it was total non-response apathy.

In an attempt to investigate attitudes among staff in general, and not just those involved with the project, to the use of student feedback information to facilitate teacher-student communication, a survey was undertaken in the Polytechnic some six months after "Communication about Communication" was circulated to staff. A criticism of a project such as this, and of voluntary staff development initiatives in general, is that those teachers who participate are those who least need to. It is difficult to dispute this argument. However, the survey in question was in part an attempt to increase staff awareness of the purpose and thinking of the project. Consequently, many of the attitudinal statements to which the teachers were asked to respond were, in effect, direct statements evolved from the basic thinking behind the project, couched both in negative and positive terms. It was hoped that, through answering these questions, some teachers would be persuaded to refer back to the original document and re-appraise their non-co-operation. It was also hoped to gain some feedback on the extent to which "Communication about Communication" was read and considered. So the final evaluatory document which was devised was intended to serve a variety of purposes and consequently possibly did not achieve any of them to the maximum extent.

The original intention was to attempt a survey of all academic staff in the Polytechnic. This was deemed potentially valuable in terms of the 'propaganda purpose' of the exercise. However, in relation to the other purposes, outlined above, a complete sampling would have served little real purpose and would not have improved the quality or reliability of the responses. The selected sample was one in five, chosen from the alphabetical academic staff list of the Polytechnic. Questionnaires were sent out through the internal mail system to 145 teachers. A reminder letter was circularised a month after the original communication. A total of 133 completed questionnaires were received, this being 91.7% of the sample. A further three were returned uncompleted because the teachers had either left or were on sabbatical leave.

In the questionnaire, questions 1, 2, 3, and 6 relate to the teachers' reactions to "Communication about Communication" and their use of student evaluatory questionnaires in general. Questions 4 and 5 consist of a series of attitudinal statements about the use of such instruments.

Consequently, the two sections will be dealt with separately in this discussion.

The booklet of draft questionnaires and ideas for obtaining feedback on teaching, entitled "Communication about Communication" had been sent to all academic staff in the Polytechnic at the start of the academic year, with the invitation to consider using aspects of it or adaptations from it as part of their teaching procedures. Teachers were invited to operate in consultation with the researcher or on their own initiative, as they saw appropraite. Question I asked the sample "To what extent, if at all, have you used the questionnaires in the package?", and the responses were as follows:-

		No.	%
I)	Have actually used with a class	I2	9
2)	Intend to use with a class	29	22
3)	Considered use but rejected idea	37	28
4)	Did not consider them appropriate	30	22
5)	Can't answer	25	I9
			I00

It is indicative of a general level of apathy that such a small proportion, about one-third, had actually used or claimed the intention to use the package. However, the number who actually had used the schedules suggests that the overall useage was greater than suggested by the case studies. This is evident because only six teachers in the selected sample participated directly in the project. In retrospect, the question contains a degree of ambiguity in alternatives 3 and 4 which overlap to some considerable extent.

Question 2 indicates the 'propaganda' intent of the schedule by phrasing the question to include an expression of sympathy for the workload of Polytechnic teachers. The question read "Recognizing that circulars often are low priority reading, I would be interested to know if you can recall the extent to which you were able to find the time to read the booklet". The responses were as follows:-

		No.	%
I)	Read it thoroughly	42	3I
2)	Perused it briefly	67	50
3)	Did not read it at all	I3	I0
4)	Can't remember receiving it	I0	8
5)	Can't answer	I	I
			I00

Approximately one-third of the sample claim to have read the package thoroughly although cross-tabulation indicates that only two-thirds of this group responded either I or 2 to question I. Far more anomalous is the one teacher who claims to have used the Questionnaires while not recollecting receiving the package. This could indicate involvement in a group implementation of the procedure. Only a small proportion of the sample admit to not having read the package although some problems of response may have been presented by a degree of overlapping between options 3 and 4.

Question 3, likewise, might well have presented problems of ambiguity to respondents, particularly where discussions about the package occurred in a number of situations. The question asked: "To what extent did you discuss "Communication about Communication" with colleagues at the Polytechnic?", and the responses were as follows:-

		No.	%
I)	Attended a departmental meeting at which it was discussed	I7	I3
2)	Discussed it in some detail informally with colleagues	I9	I4
3)	Discussed it briefly with colleagues	54	4I
4)	Did not discuss it	4I	30
5)	Can't answer	2	2
			I00

This question produced a fairly predictable pattern of responses, although the extent of discussion at departmental meetings is certainly encouraging, especially in view of the suggestion that information from evaluations can be used as the basis of discussion in departmental and staff-student meetings.

Question 6, finally asked "Have you used any other feedback or evaluation instrument during your teaching career?", to which the responses were:

	No.	%
Yes	34	26
No	99	74
		I00

This is an indication of the extent to which other schemes are tried out in higher education in this country, both as "one-off" exercises and as more formalised schemes. Respondents were asked for further details

about the examples they were referring to and the majority were of the former type.

Question 4 and 5 were of a very different format, containing ten and eighteen statements respectively about student feedback questionnaires. Respondents were given the following alternative responses:

1) agree with statement
2) disagree with statement
3) can't answer

As part of the attempt to encourage further consideration of the package and its ideas, both questions were prefaced by explanatory statements. Question 4,containing basically negative statements, began: "The following statements are some of the reservations which have been expressed in relation to "Communication about Communication". Statements in Question 5 are of a somewhat different type and this question was prefaced with the following sentence: "The following statements represent some of the principles which were instrumental in the development of the draft questionnaires". Thus the researcher's value orientation was made abundantly clear to respondents. The responses to each statement are given in Table 30.

Immediately striking in the pattern of responses is the extent to which "can't answer" was employed, ranging between 2I% and 42% of total responses. This is suggestive of the lack of consensus which characterizes the use of student feedback questionnaires generally and the specific "low-level", informal approach adopted in this project. It might also suggest that the issues in question have not been of very great concern to a number of teachers; indeed they might never have previously considered them.

The general pattern of responses served to support the value orientation of the project. The criticisms contained in the statements in Question 4 elicited approximately an equal level of positive and negative responses, with considerable variation between individual statements. Responses to the statements in Question 5 are, with the exception of (i), much more uniform, with between 5I% and 69% of the sample agreeing with the statements which form the basic thinking behind the project. Overall, therefore, the responses can be seen as encouraging. However,considerable caution is advisable in their interpretation as it would seem likely that the clearly stated value orientation of the project may well have encouraged responses in support, these being seen as the "desirable"

Table 30

Question 4		RESPONSES		
		Agree	Disagree	Can't Answer
i)	"I don't need questionnaires to obtain feedback on my teaching".	62 48%	39 29%	31 23%
ii)	"I just haven't got the time to fiddle around with these pieces of paper".	46 34%	50 38%	37 28%
iii)	"The questions are far too general to be meaningful".	39 30%	38 28%	56 42%
iv)	"Questionnaires impose too much structure on a wide range of possible answers".	63 47%	30 22%	40 31%
v)	"The exercise might make students look for faults which aren't really there".	45 33%	41 31%	47 36%
vi)	"The information might reach my head of department and, whatever the results, I don't want that to happen".	25 18%	74 56%	34 26%
vii)	"With my small teaching groups, this sort of exercise is pointless".	50 37%	42 32%	41 31%
viii)	"I'm not in a position to change the course if the students don't like it".	38 28%	61 46%	34 26%
ix)	"Students have no right to tell me how to teach".	33 24%	60 46%	40 30%
x)	"Students may not know the truth".	52 39%	41 31%	40 30%
Question 5				
i)	"Results from the questionnaires should be available only to the participating teachers".	44 33%	46 35%	43 32%
ii)	"Results about individual teachers should not be available to heads of department".	62 47%	38 29%	33 24%
iii)	"Results from questionnaires should not be available to senior administrators outside the department".	78 58%	26 20%	29 22%
iv)	"Student feedback questionnaires should be used for teaching and course improvement".	74 56%	31 23%	28 21%

Question 5 Contd.		Responses		
		Agree	Disagree	Can't answer
v)	"The questionnaire should be suitable for adaptation by staff to suit their own requirements."	86 64%	21 16%	26 30%
vi)	"The questions should be simple and easy for students to answer."	85 63%	18 14%	30 23%
vii)	"The questionnaires should be brief so that as little time as possible is spent in completing them."	89 67%	14 10%	30 23%
viii)	"The questionnaires should be completed by students in class and returned immediately."	73 54%	27 21%	33 25%
ix)	"In an ideal situation, questionnaires would be superseded by face-to-face discussion between staff and students."	78 59%	18 13%	37 28%
x)	"There are usually problems on all courses, however trivial, which it is beneficial for the teacher to identify."	80 60%	16 12%	37 28%
xi)	"The student viewpoint is an important perspective on a course."	92 69%	16 12%	25 19%
xii)	"Questions should avoid comparison with other teachers or courses."	84 63%	17 13%	32 24%
xiii)	"Information on courses from student feedback questionnaires can provide a useful basis for discussion in staff/student committees."	70 52%	26 20%	37 28%
xiv)	"The time and effort required from time to time to use these questionnaires is worthwhile in terms of a teacher obtaining feedback on his teaching."	68 52%	31 23%	34 25%
xv)	"Questionnnaires, while having a number of evident weaknesses, provide a useful starting point for improved rapport between staff and students."	60 46%	44 33%	29 21%
xvi)	"Confidentiality should be guaranteed to each participating student."	87 66%	23 17%	23 17%
xvii)	"Participation by students should be voluntary."	88 66%	18 14%	27 20%
xviii)	"Participating teachers should be encouraged to discuss results with their students."	75 56%	26 20%	32 24%

standpoint to hold.

The purpose of conducting the survey was, as has been outlined above, threefold. To what extent these were successfully achieved is difficult to ascertain. Feedback on the notice taken of "Communication about Communication" was encouraging while not being conclusive. Responses to the value statements suggests that support for the ideas and approach adopted by the project is more widespread than has been manifested in participation and that possibly the original canvas for support was insufficiently lucid in its statement of aims and strategies. The extent to which the survey galvanized renewed interest and application of these ideas is likewise difficult to determine although a number of contacts and embryo initiatives resulted from the survey. In retrospect, the survey was a useful device for the collection of information as well as for the dissemination of ideas; however, it is fair to say that it was both too small scale and initiated rather too late.

Chapter Eight

CONCLUDING CHAPTER

In a recent paper, Brandt (I980)[93] identifies a common purpose to staff development programmes, world-wide, despite many differing external features. The main concern of such programmes is, he argues,

> "to bring about change in the structure of students-teacher communication toward a more symmetrical process where both teacher and students think of themselves as learners".

This concern, in perhaps a more limited sense, has emerged as the primary concern within the present project, particularily the determination "to bring about change in the structure of students-teacher communciation". As the introductory chapter to this thesis indictes, this was not the avowed aim at the onset of the project, although it is not inconsistent with it. Initial concern was predominantly with developing means by which teachers could monitor the learning experiences of their students, in other words with the feedback process in teaching. Basically, this thesis outlines the stages through which a research project evolved from a concern for one-way communication to the development of techniques which are essentially two-way and inter-dependant. This final chapter will attempt a number of things:

i) to identify the main features and achievements of the work which distinguish it from the considerable volume of other studies in this general field;

ii) to discuss shortcomings of the project and where work may usefully be continued;

iii) to identify some of the methodological implications and considerations of the study;

iv) to consider the project as part of a research training and the way in which it has influenced my thinking and practices as a teacher.

A. Main Features of the study

The volume of work which can be included under the general ambit of feed-back on teaching is considerable. In a survey of American work, Flood-Page (I974)[94] identified items (papers and books) to be counted in hundreds from the United States and Canada alone. Subsequent developments have seen little abatement of this pro-

liferation on either side of the Atlantic. In view of this, it is somewhat presumptious to claim any degree of genuine originality for this project. The germ of most of the ideas will have existed elsewhere at some other time, even if in a somewhat different context and in association with other concepts or methodologies. A number of these are acknowledged in the literature review. However, this particular study has incorporated a philosophy and approach to practice which does not seem to have been adopted in its entirety elsewhere. Some of the more important of these are listed below (in no particular order of priority or importance):

i) The view, as expressed by Brandt at the start of this chapter, that communication between teacher and students is an important key to effective learning on the part of the latter. As part of the same process, the teacher may be learner as well, in terms of both his own subject and, in particular, in relation to his pedagogy. The logical concomitant to this view is that ineffective communication or the existence of educational, academic or personal barriers between teacher and students, may have an adverse effect on the success of the learning processes.

ii) That full and frank discussion about a course in all its perspectives- content, objectives, teaching methods, assessment strategies and use of resources- is the central concern of a two-way communication process. Processes such as these, with the teacher in mind, are identified as FEED-IN and FEED-BACK statements; it is seen as a teacher responsibility to initiate such communication.

iii) Personal discussion, where feasible, is preferable to the employment of more formal information-gathering techniques. It is recognised, however, that this is not always practicable or possible.

iv) Questionnaires and schedules are seen as <u>facilitators</u> of discussion and improved communication between teacher and students and not as alternatives to discussion. They can have both educational and political value.

v) A student questionnaire about a course or aspect of a course is predominantly reflective of the immediate situation. Even related to this particular situation, it is of strictly limited validity, but this limitation is even

more true in terms of general course validity. Attitudes and perceptions of both teachers and students are, generally, fairly volatile and, consequently, cannot be employed as summative information. The frequently adopted approach to employ end-of-course evaluation is rejected as providing information of limited validity which has no practical transferability to subsequent classes.

vi) A logical extension of v) is that each class and teaching situation is characterised by predominating features of uniqueness rather than similarity. Student evaluation projects tend to assume an underlying similarity between classes, at least within disciplines (for example, AID). While certain features may well be found in common, the over-riding influence on teaching and learning is provided by the "chemistry" between teacher and students, by unique features in the class situation. This may appear to be a somewhat naive belief, but is born out by the frequent experience where an identical course taught to two different groups can be a totally different experience. In these terms, the practice of providing intending students with the evaluations of the preceding student generation is a dubious practice.

vii) If it is accepted that student feed-back instruments, as well as discussion relating to teaching and learning, are only of immediate validity and do not have more general application, it follows that such information should be the sole concern of the teacher or team of teachers directly involved with the course, and it is not appropriate to give such information to colleagues in positions of authority or administrators removed from the teaching situation. Its sole value relates to that particular course at the time of administration and is not valid information for the general evaluation of the teacher. The draft schedules in "Communication about Communication" were designed with this approach clearly in mind.

viii) Wherever possible, information elicited through use of a feed-back schedule should be shared and discussed by the teacher with the student group as a whole or, if too large, with smaller sections or samples of the class. This is vital if the instrument is to act as a facilitator of communication. Such discussion, showing a commitment to joint participation in the course, can lead to the redundancy of "pen and paper" instruments on subsequent occasions.

ix) Because of the peculiarities of each institutional and course context, there is considerable weaknesses to the use of generalised student feedback instruments. They are unlikely to be sympathetic to these very peculiarities and thus may omit important perspectives of a course. These instruments will be recognised as relatively impersonal by students and teacher and thus may loose their "political" value. An important feature of the "Communication about Communication" instruments is that they are intended to be adapted, changed or completely rewritten to suit the specific requirements of the teacher and course in question.

x) The previous point leaves the instruments, possibly, prone to ambiguity and other validity problems. With this in mind, four simple procedures have been evolved which a teacher may undertake to minimise these problems.

xi) A direct consequence of the flexibility of the project and the encouragement afforded for adaptation and change with the actual instruments and the manner in which they were employed, was the considerable and diverse useage of the ideas and instruments. Many of these had not been anticipated, as has been outlined in chapter 5, but suggest that a flexible approach to the development of student feedback schedules could result in more diverse employment in other contexts. It also suggests that the normal restrictions which are implicit in most student evaluation schemes may be imposing unnatural and invalidating constraints on the exercise so as to achieve the uniformity and generalisations by which they are characterised.

xii)Whenever schedules or derivations from the booklet were employed, the exercise was under the constant and sole control of the participating teacher. Time, manner and place were all determined by him and the researcher was only involved if invited. This was possible because of the determination to keep construction, administration and interpretation of the instruments at the simplest and least time-consuming level.

xiii) The research implications of the project (consistency of methodology, time constraints etc.) were always secondary to the pragmatic, educational concerns of the initiative at hand and the two were never permitted to conflict. This may have resulted in some weakening of the aspired-for research design but this loss was more than compensated for by the greater commitment and co-operation received from staff.

xiv) Student interest and involvement with the project was very encouraging. Almost without exception, the schedules were completed with commitment and interest. Subsequent discussions showed interest and concern at an unanticipated level. This contrasts with the opinion expressed by some critics about the project that "students have no useful opinions about teaching and don't really care, anyway".

xv) Many terms and expressions are used in higher education in a manner which suggests that they mean the same thing in different situations. Examples of these include descriptions of teaching methods; seminars, tutorials, projects etc. This is clearly an invalid assumption and one which must invalidate instruments which assume such common currency and make generalisations on the strength of it. No such assumptions were made with the present project and teachers were free to insert whatever terms were in current use on the course in question. Because no comparison with other courses or teachers were attempted, different interpretations of terms did not present a problem.

B. Shortcomings and future work

It is a well-worn convention in research studies to append suggestions for future work on similar lines. However, the manner in which the current project evolved, suggests that many of the ideas and practices do require further testing and application in differing institutional contexts. To some extent this has already occurred. "Communication about Communication" has been requested by a number of other institutions in this country for discussion, has been reviewed favourably and made available within an Australian University, while parts of it have been incorporated by Habeshaw within a recent workbook, "Towards a Policy of Self-development for Teachers"[95]. As the introductory chapter indicates, the final research product was not clearly identified when the project was initiated. The development to a position where a philosophy and series of procedures, as outlined above, could be identified, was relatively slow and evolved, to some extent, in the dark. The research design specifically allowed for changes of direction or the incorporation of new ideas. However, many of the more important features of the project were only clearly perceived towards the end of its duration and, consequently, may not have received as full and detailed consideration as would have been desirable. A number of "red herring" concepts were pursued during the development of the project, notably the attempt

to quantify a"gap" between the perceptions of a teacher and his students. These expended considerable energy which, in the event, was undertaken to no useful purpose, except that they did contribute to the identification of the final approach which was adopted. The shortcomings of the project, therefore, are essentially those which subsequent work elsewhere could rectify. The procedures have been tested and modified in the light of experience within one institution. It was beyond the scope of the project to directly initiate activities elsewhere, although discussions and invited papers were presented at a number of other institutions. It is possible that a number of the features of the project are a direct response to the specific institutional context in which the work was undertaken. This cannot be determined with any certainty unless they are tried out elsewhere.

C. Methodology

The methodology of the project was essentially a pragmatic, even opportunist, one. It involved a series of direction changes and responses to circumstances which significantly altered the aims and practices of the project. Therefore, it was fairly unorthodox and does not conform directly with conventional social science research paradigms. The over-riding considerations, when opting for particular strategies, included:

i) Would the particular approach-investigation be merely interesting (staff age, degrees held etc.) or really relevant and useful to the project? If merely the former, it was not pursued. This was of particular importance during questionnaire design.

ii) Was the activity in question, of a dubious ethical or educational nature? Practices which involved deceit of staff or students were rejected.

iii) The importance of simplicity and practicability of application were always paramount in consideration. Thus, instruments were designed to be simple to understand and easy to administer. This was undertaken even if it resulted in the omission or simplification of some issues. When staff constructed or adapted schedules for their own use, I attempted to impress this practice on them.

iv) Commitment to complete confidentiality was always given and this was maintained so that no individual, course, department or

school could be subsequently identified in publication etc. unless prior consent was obtained.

v) No generalisations were aspired to or attempted as a result of the information obtained. This was inevitable in view of the project philosophy and the adoption of methodologies which are not amenable to such generalisations.

vi) No particular approach or methodology was sacrosanct. In other words, the research methodology was always subservient to the particular requirements of a course or teacher.

vii) No request from staff, even if at variance with aspects of the project philosophy, was refused. In practice, no major conflict accrued.

The methodology of the project, therefore, will be seen to be one of pragmatism and concern for personal and educational issues. It has maintained a fluidity and flexibility with which some academic purists might express concern. However, at no point has academic rigour and precision been compromised. In the context of this project, a conventional, scientific evaluation would not be appropriate and would, in all probability, face considerable problems as to exactly what is to be evaluated. The illuminative evaluation model is, however, more amenable to the procedures which were followed. To a large extent, the activities of the project were internally evaluated during operation and decisions were made as a result of these evaluations. The final evaluation, within this paradigm, rests on a perusal of all available evidence as to its use and the effectiveness of its use. The evidence is presented as the body of this thesis and the positive points and shortcomings constitute the earlier sections of this chapter. In view of this, and the multi-various factors which pertain to the project, a simple "successful" or "unsuccessful" evaluation, which might be attempted with some research models, is inappropriate and will not be attempted. The evidence is presented and it is up to the subjective judgement of the reader, preferably through utilisation of some of the ideas, to form an evaluation of the project.

D. Postscript

As a postscript to this thesis, I think it is appropriate to append a short note regarding the project as part of a research training and the way it has influenced my own thinking and practice as a teacher

and researcher. The project was by no means an easy one to undertake and a valid case can be made that the work has not been really taken as far as might have been possible. Many ideas have been generated but to pursue them fully was beyond the scope of a project at this level.

The project has given me direct insights and experience of the political and educational undercurrents which characterise institutions of higher education. Operating, in status terms, from a relatively low and non-threatening position, this experience has been invaluable and has greatly assisted me in coming to terms with the demands of my present post.

As a research endeavour, the project has provided a useful and maturing experience. As I have already indicated, the development of the project was dictated by pragmatic considerations during its evolution and not by pre-determined objectives. Decisions were made on the basis of discussion and negotiation with my supervisor and the ideas which eminated from them are, in many instances, co-operative endeavours. It is important for this to be acknowledged and this is the reason why "Communication about Communication" was published under joint authorship.

This co-operative element to the research, combined with the fairly wide range of methodologies with which I have become familiar as a result of working on this project, has generated an interest in the nature and purpose of a research training which has culminated in the publication of a number of papers.[96,97,98,99] This is a direct, and perhaps the most rewarding, consequence of the research experience. The extent to which the ideas generated by the project have influenced my own teaching practice is difficult to say. I have sufficient conviction in their validity to believe that they have.

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APPENDIX ONE

TRENT POLYTECHNIC TEACHING ANALYSIS PROJECT

TAP Q1

Student Questionnaire

This survey seeks information about your experiences of learning in the Polytechnic. You are invited to answer the following questions. It is part of a Polytechnic research project which is concerned with the improvement of teaching and learning in higher education. Similar questions are being asked of the teaching staff. Replies will be anonymous and no individual will be identifiable when the results are published. It is intended to make the results generally available when the survey is completed.

1. What course are you on ?

(The code will be given out by the research worker issuing the questionnaire)

code [ ] ○1 ○2

2. What year of the course are you on?

number [ ] ○3

3. To what extent are you aware of the educational aims and objectives of your overall course of study?

(Please tick one box)

fully aware		1
reasonably aware		2
slightly aware		3 ○4
unaware		4
don't know		5

4. How do you rate these eight kinds of learning experience insofar as they are part of your course? Answer in terms of very worthwhile/ worthwhile/ hardly worthwhile/ useless/ don't know/ no experience.

(Please put one tick in the appropriate box in each row).

	1 very worthwhile	2 worthwhile	3 hardly worthwhile	4 useless	5 don't know/ no experience	
lectures						○5
seminars						○6
tutorials						○7
practicals						○8
individual study						○9
project work						○10
professional placement						○11
field work						○12

5. How do you think your lecturers will rate these?

(If you don't know how your lecturers will rate them — leave the column blank).

	1 very worthwhile	2 worthwhile	3 hardly worthwhile	4 useless	5 don't know / no experience	
lectures						13
seminars						14
tutorials						15
practicals						16
individual study						17
project work						18
professional placement						19
field work						20

6. From your experience on this course, have you felt any gap between the expectations of lecturers and your experience of the teaching and learning process?

(Please tick one box)

no gap at all		1
a slight gap		2
a wide gap		3 21
a very wide gap		4
don't know		5

7. To what extent are you satisfied with your course?

(Please tick one box)

completely satisfied		1
satisfied		2
dissatisfied		3 22
utterly dissatisfied		4
don't know		5

8. How many hours do you estimate that you spend in an average week of term time* on individual study?

* other than examination times.

(Please put numbers of hours in the boxes)

essays/ seminar papers		23 24
report writing/ projects		25 26
reading		27 28
preparation for practical work		29 30
lecture notes		31 32
problems/ exercises		33 34
other		35 36
TOTAL		37 38

9. How do you rate the work of your course Staff Student Consultative Committee?

(Please tick one box)

very worthwhile		1
worthwhile		2
sometimes worthwhile		3
worthless		4
don't know/ no experience		5

39

10. How adequate do you find the opportunities which you have to meet your personal tutor?

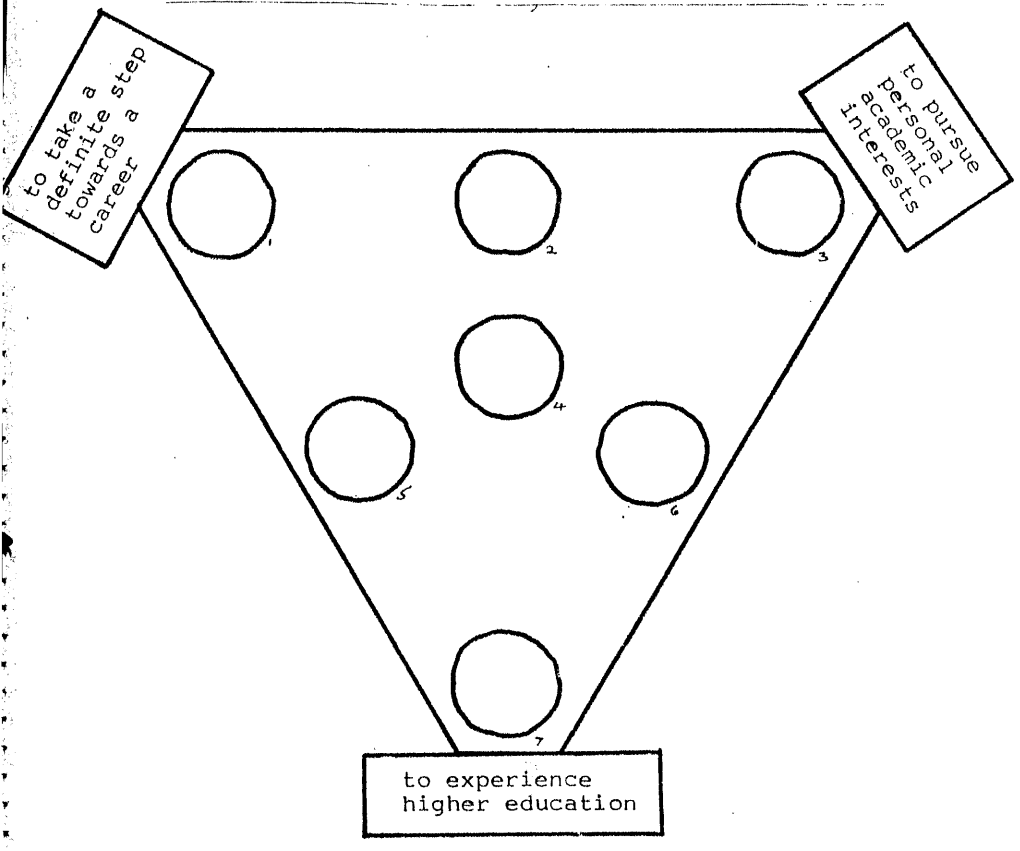
(Please tick one box)

totally adequate and satisfactory		1
adequate and satisfactory		2
inadequate		3
totally inadequate		4
don't know/ no personal tutor		5

40

11. Why are you undertaking this course of study?

(Please put a tick in the circle which comes nearest to your opinion about the three suggested reasons)



4.1

12. Do you think that students have the right amount of involvement in the overall course planning and content?

(Please tick one box)

not enough		1
the right amount		2
too much		3
don't know		4

4.2

13. Do you think that students have the right amount of involvement in the day to day planning of their course?

(Please tick one box)

not enough		1
the right amount		2
too much		3
don't know		4

4.3

14. Any other comments. (Please write any immediate comments here).

Thank you for your participation in this investigation. Please hand in this questionnaire, when completed, to the research worker who issued it. If you are willing to elaborate on your answers, you are invited to complete the separate questionnaire, TAP Q3, in your own time and return it to me in the envelope provided.

Tom Baum, Research Assistant, School of Education, Trent Polytechnic.

TRENT POLYTECHNIC TEACHING ANALYSIS PROJECT

TAP Q3

Student Questionnaire

The questions which you answered on TAP Q1 required structured responses. It may be that you wish to comment in greater detail on all or any of the points raised in it. This open ended schedule is designed for this purpose and, as answering it may take some time, you are invited to complete it in your own time and return it via internal mail in the provided envelope. As with the other questionnaire, strictest confidence will be maintained.

1. What course are you on? code

2. What year of the course are you on?

3. How important is it to you, to be fully aware of the educational aims and objectives of your overall course of study?

4. What aspects of your course are most relevant to your satisfying your reasons for undertaking the course?

5. Do you think that a gap between the expectations of lecturers and the experiences of students in the teaching and learning process is beneficial or detrimental in any way?

6. With what aspects of your course are you a) most satisfied and b) most dissatisfied?

7. Do you find problems with your expected work load, both in terms of class work and out of class work?

8. For what purposes (personal, academic, social etc.) do you consult your personal tutor?

9. Do you experience much difficulty obtaining necessary resources (books, equipment, tapes etc.) for your use on the course?

Please return this questionnaire in the provided envelope, to the address below.* Thank you for assisting with this project.

Tom Baum, Research Assistant, Dept. of Education, York House.

* Either ask your Departmental Secretary to put it in the internal mail, or hand it to the Porter's Desk in the Newton Building.

TGB/15.2.77

APPENDIX TWO

TRENT POLYTECHNIC TEACHING ANALYSIS PROJECT

TAP Q2

Questionnaire for lecturers

This survey seeks information about your view of students' experience of learning on one particular course on which you teach in the Polytechnic. You are invited to answer the following questions. It is part of a Polytechnic research project which is concerned with the improvement of teaching and learning methods in higher education. Similar questions are being asked of students. Replies will be anonymous and no individual will be identifiable when the results are published. It is intended to make the results generally available in the Polytechnic when the survey is complete.

1. To which course do these answers refer?
(The code will be given by the interviewer. The identity of courses will be known only to the research team & will be treated as confidential).

code [ ] (1) (2)

2. To which year of the course do they refer?

number [ ] (3)

3. To what extent do you believe your students are aware of the educational aims and objectives of their overall course of study?

(Please tick one box).

fully aware		1
reasonably aware		2
slightly aware		3 (4)
unaware		4
don't know		5

4. How do you rate these eight kinds of learning experience insofar as they are part of your course. Answer in terms of very worthwhile/ worthwhile/ hardly worthwhile/ useless/ don't know/ no experience.

(Please put one tick in the appropriate box in each row)

	1 very worthwhile	2 worthwhile	3 hardly worthwhile	4 useless	5 don't know/ no experience	
lectures						(5)
seminars						(6)
tutorials						(7)
practicals						(8)
individual study						(9)
project work						(10)
professional placement						(11)
field work						(12)

5. How do you think <u>your students</u> will rate these?

(If you don't know how your students will rate them – leave the column blank).

	1 very worthwhile	2 worthwhile	3 hardly worthwhile	4 useless	5 don't know / no experience	
lectures						13
seminars						14
tutorials						15
practicals						16
individual study						17
project work						18
professional placement						19
field work						20

6. From your experience on this course, have you felt any gap between your expectations and the experiences which students have in the teaching and learning process?

(Please tick one box)

no gap at all		1
a slight gap		2
a wide gap		3 21
a very wide gap		4
don't know		5

7. To what extent are you satisfied with the course?

(Please tick one box)

completely satisfied		1
satisfied		2
dissatisfied		3 22
utterly dissatisfied		4
don't know		5

8. How many hours do you estimate that your students spend in an average week of term time* on individual study? Give your answer in terms of your concept of what you hope and expect of an average student on your course.

* other than examination times.

(Please put numbers of hours in the boxes).

essays/ seminar papers		23 24
report writing/ projects		25 26
reading		27 28
preparation for practical work		29 30
lecture notes		31 32
problems/ exercises		33 34
other		35 36
TOTAL		37 38

9. How do you rate the work of your course Staff Student Consultative Committee?

(Please tick one box).

very worthwhile		1
worthwhile		2
sometimes worthwhile		3 39
worthless		4
don't know/ no experience		5

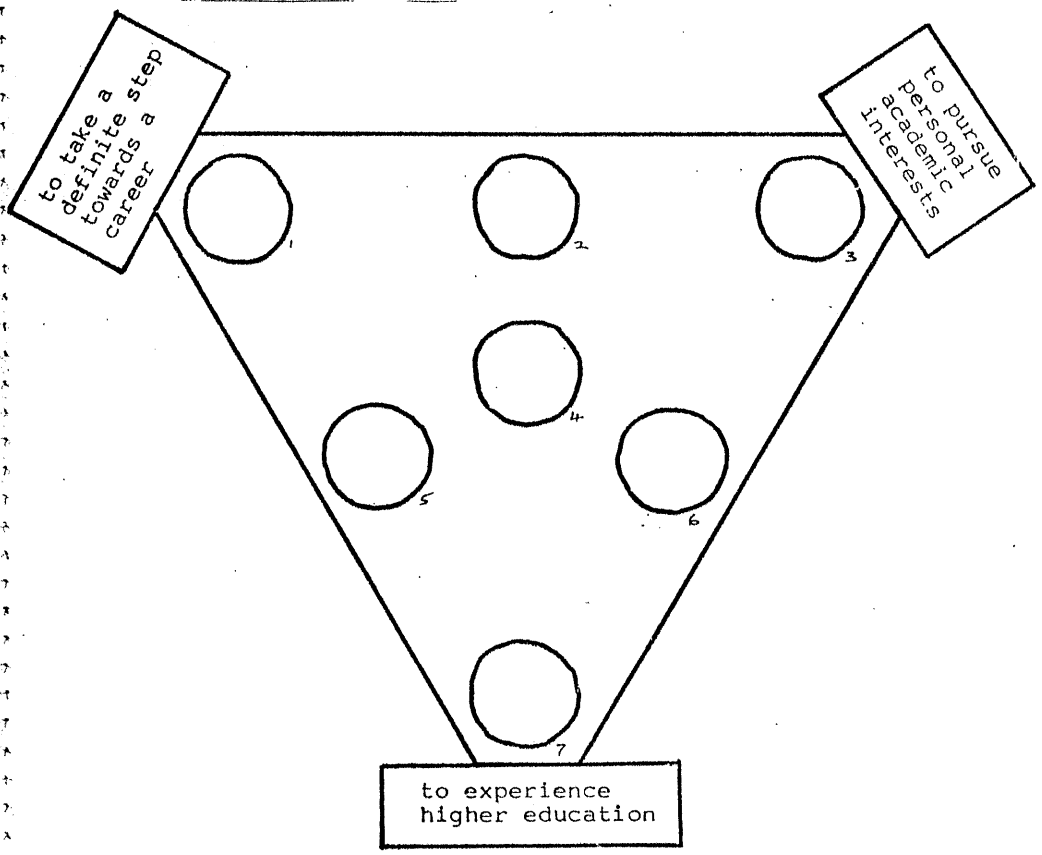
10. How adequate do you find the opportunities which you have to meet your personal students?

(Please tick one box)

totally adequate and satisfactory		1
adequate and satisfactory		2
inadequate		3 40
totally inadequate		4
don't know/ no personal tutor		5

11. Why should students take this course of study?

(Please put a tick in the circle which comes nearest to your opinion about the three suggested reasons).



41

12. Do you think that students have the right amount of involvement in the overall course planning and content?

(Please tick one box).

not enough		1
the right amount		2
too much		3
don't know		4

42

13. Do you think that students have the right amount of involvement in the day to day planning of their course?

(Please tick one box).

not enough		1
the right amount		2
too much		3
don't know		4

43

14. The questions so far have entailed structured responses and it may be that you wish to elaborate on these answers and to provide further comments on these and other aspects of your students' experience in higher education. Please feel free to comment below.

a) Course aims, objectives and content.

b) Staff/ student contact.

c) Student involvement in course planning.

d) Teaching methods.

e)Availability of resources.

f) Value of the course.

14. cont.

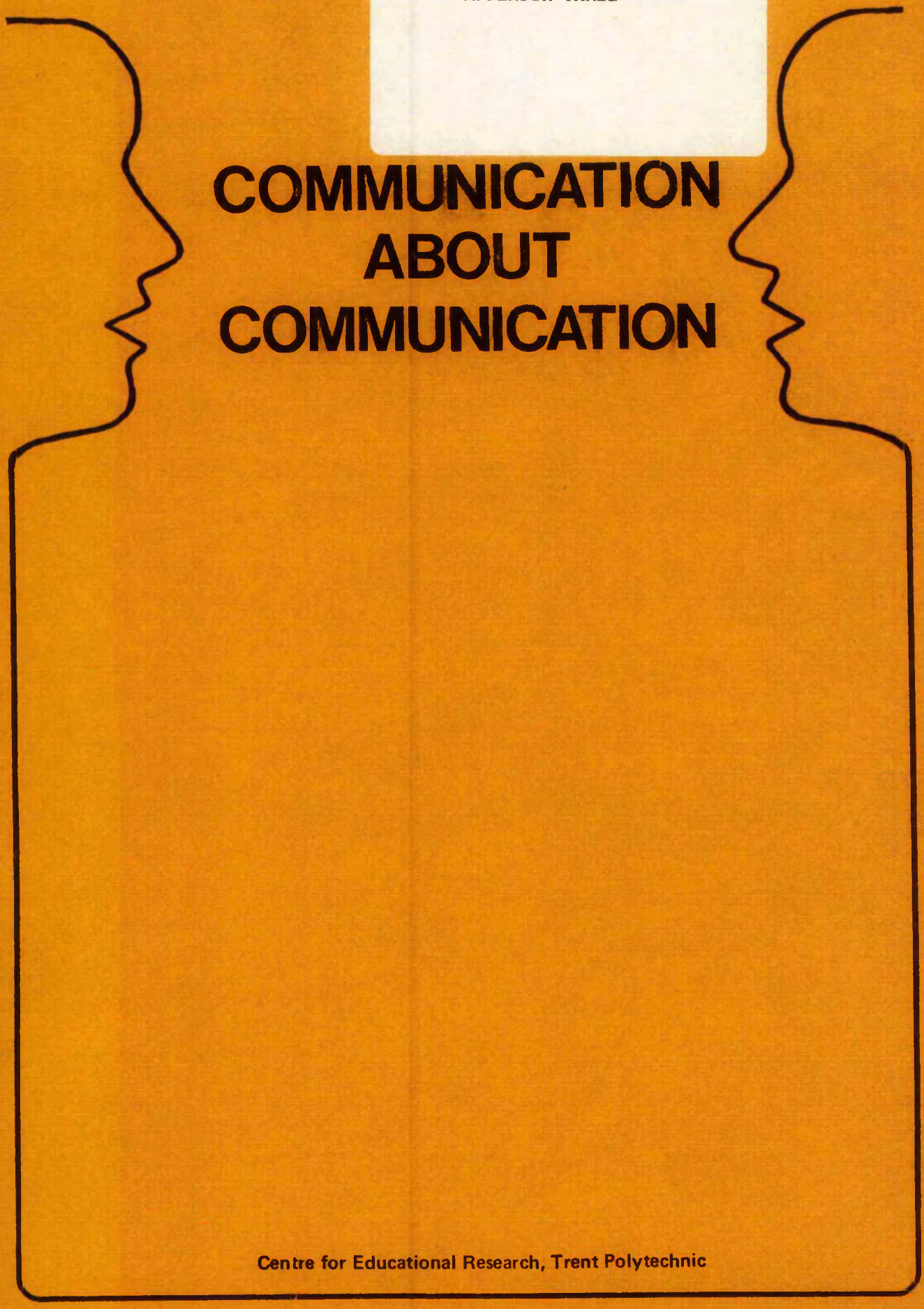
g) Student work load.

h) Any other comments.

Thank you for your participation in this investigation.

Tom Baum, Research Assistant, School of Education, Trent Polytechnic.

APPENDIX THREE



COMMUNICATION ABOUT COMMUNICATION

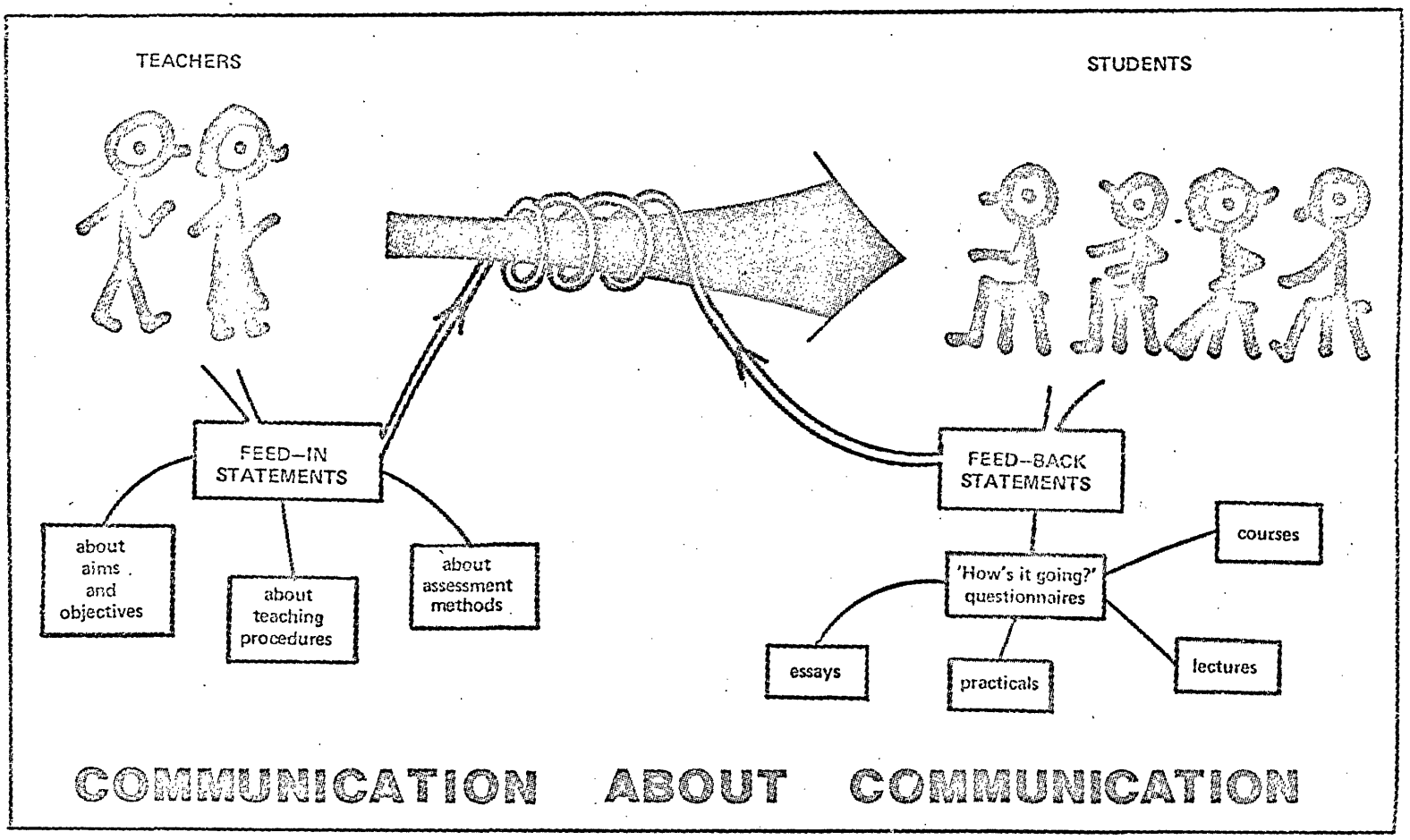
Centre for Educational Research, Trent Polytechnic

COMMUNICATION ABOUT COMMUNICATION

Ways of improving learning by stimulating communication between teachers and students about the educational processes in which they are engaged.

Michael Bassey and Tom Baum,
Centre for Educational Research,
Trent Polytechnic, Nottingham.

June 1978



COMMUNICATION ABOUT COMMUNICATION

COMMUNICATION ABOUT COMMUNICATION

This is about communications between teachers and their students in colleges, polytechnics and universities.

Both teachers and students have the common purpose of so organizing their activities that the latter learn the concepts, skills and values of a body of knowledge effectively; this is what teaching is about. Put like this, it is obvious that efficient communication about the process of teaching and what it is achieving is likely to be worthwhile.

Two questions, addressed to teachers, are our starting point:

(i) To what extent do you discuss the educational process of a course with students; do you give students FEED-IN statements?

(ii) To what extent do you discuss effectiveness during a course; do you get FEED-BACK statements from your students?

It is our belief that the kind of dialogue between teachers and students which is suggested by these questions, can enhance the processes of learning. The questionnaires which follow provide ways of helping this dialogue: as suggested by the illustration opposite, they provide ways of communicating about communication.

A tenet of our approach is that the questions suggested are for teachers themselves to ask and not for administrators and others to use for purposes of evaluating courses or teachers. The questions are not designed for research investigations either. Their purpose is to improve communication between teachers and students.

The questionnaires are designed either to be used as they stand, or to be adapted to the particular requirements of courses and teachers. They can only be starting points for improved communications; they may diagnose problems, but they cannot provide remedies. In essence they can promote face-to-face discussions about the processes of teaching and learning between students and teachers. Through this discussion the processes may improve.

FEED-IN STATEMENTS

To what extent do you discuss the educational process of a course with students?

Here are seven questions to muse over.

1. Do you issue students with a statement of aims and objectives at the start of a course; do you discuss these at the start; do you discuss these on subsequent occasions?

2. Do you issue a programme giving the major teaching events of a course?

3. Do you discuss the teaching methods adopted for a course; do you explain your choice?

4. Do you assist students in locating resources for individual learning, for example do you issue book lists and library guides?

5. Do you outline your intentions for individual teaching sessions?

6. Do you explain why particular assessment procedues have been adopted for a course?

7. Do your students wish to discuss the above questions with you and is such discussion profitable?

Most teachers will answer 'yes' to some of these questions and 'no' to others. If you feel that some of these issues might be taken further than is your present practice, you may find that the ideas here point the way.

FEED-BACK STATEMENTS

To what extent do you seek feedback during a course about its effectiveness?

The following pages contain questionnaires which probe into students' experience of a course. We think it is usually better to seek the comments of the whole student body when enquiring about teaching effectiveness, rather than relying on the 'corridor gossip of the vociferous. These questionnaires provide starting points which can lead to open-ended and face-to-face discussions and we suggest that it is these discussions which are the key to improving the educational process.

Courses differ widely in both content and process and may need quite different questions in order to explore effectiveness. It is envisaged that these questionnaires will be modified by you and used according to particular need. In general they are intended to be simple and brief.

The first instrument is the COURSE EFFECTIVENESS QUESTIONNAIRE. This can be used either by a group of teachers in relation to a complete course or by an individual teacher on units for which he or she alone is responsible. If used for a complete course it can provide a useful agenda item for a staff-student committee.

Comment is necessary about the use of simple and everyday language such as is used in the question "To what extent are you satisfied with your course?" Clearly answers depend upon what respondents mean by "satisfied". If the questionnaire were a research tool it might be necessary to carefully define the term, but since here it is a pragmatic enquiry into particular instances of teaching, definition is not necessary. Interpretations will vary, but the point is that positive feelings aid learning while negative ones may inhibit it. The combining of responses from a group of students gives an indication of the corporate pulse and, provided it is recognised as no more than that, can be useful. It is, of course, a volatile indicator, much influenced by day-to-day events.

The scaling of responses to questions like "To what extent..." and "How do you rate..." presents a problem. Some investigators use a numerical scale between two extremes, some ask for a mark on a continuum. We use three or four-point verbal scales with an additional point termed "can't answer"; this embraces answers such as "don't know", "question not meaningful", "not applicable", "no single answer suffices", "I would need to write an essay to answer", etc.

The subsequent instruments can either be used as follow-ups to difficulties identified by the Course Effectiveness Questionnaire, or can be used in isolation. They can be used occasionally or more regularly.

COURSE EFFECTIVENESS QUESTIONNAIRE

The Course Effectiveness Questionnaire is designed as the first step in collecting and collating student viewpoints. It should provide basic opinions on important aspects of a course or parts of a course. It can be issued by one teacher in relation to his or her own teaching, or by a group of teachers in relation to an entire course.

Before using this questionnaire we suggest that you obtain the agreement of any staff who may be involved and also of the student body.

The pro-forma opposite can be photocopied and items 2, 7, 8, and 9 typed in according to the special character of the course. Alternatively individual questions can be selected, modified and added to. It is however recommended that the length of the questionnaire is not increased. It is always a temptation to gather more data, but this can be counter-productive because of the time and effort needed to collate the results.

On page 7 an example is given for a course entitled B. Sc Agricultural Science Year One. This shows how question 2 can be used to seek opinion on both teaching methods and on units of a course. Likewise possible questions for 7, 8 and 9 are given.

Pilot testing has suggested that it is best to administer the questionnaire in class time, thus ensuring immediate return by students. Not more than ten minutes is needed.

Anonymity is best and should be carefully protected.

It is probably worthwhile in presenting the results to use raw numbers rather than percentages, especially if student numbers are small. On page 8 a pro-forma is given with boxes for entering the results. It is suggested that students as well as staff should have the opportunity of looking at the findings.

The most obvious forum for discussing the findings is a staff-student committee; but if the student group is small a gathering of all students and staff may be better.

COURSE EFFECTIVENESS QUESTIONNAIRE

This questionnaire seeks information about your present course of study. Please answer as frankly as you can. Do not write your name on the sheet. Write the letter which represents the option nearest to your present opinion in the appropriate box. Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

1. To what extent are you aware of the educational aims and objectives of your course?
   a = fully aware b = reasonably aware c = slightly aware d = unaware
   e = can't answer — 1 ☐

2. How do you rate the various elements of your course as learning experiences which are worthwhile to you? (the person issuing the questionnaire will identify the elements using the codes 2A to 2J).
   a = very worthwhile b = worthwhile c = hardly worthwhile
   d = worthless e = can't answer

   2A ☐
   2B ☐
   2C ☐
   2D ☐
   2E ☐
   2F ☐
   2G ☐
   2H ☐
   2I ☐
   2J ☐

3. What do you estimate to be your average workload per week at the present time? Include all activities which are intended to promote your learning, ie lectures, tutorials, seminars, practicals, professional placements, as well as reading, essay writing and other forms of private study.
   a = less than 30 hours per week b = 30-35 hours c = 36-40 hours
   d = more than 40 hours e = can't answer — 3 ☐

4. Do you consider that your workload is:
   a = excessive b = rather too much c = about right d = too little
   e = can't answer — 4 ☐

5. Do you feel that there is a gap between your experiences of the course and the expectations of your lecturers?
   a = no gap at all b = a slight gap c = a wide gap d = a very wide gap
   e = can't answer — 5 ☐

6. To what extent are you satisfied with your course?
   a = very satisfied b = satisfied c = dissatisfied d = very dissatisfied
   e = can't answer — 6 ☐

7 ☐

8 ☐

9 ☐

Please hand this questionnaire when completed back to the person issuing it.

COURSE EFFECTIVENESS QUESTIONNAIRE B. Sc Agricultural Science

This questionnaire seeks information about your present course of study. Please answer as frankly as you can. Do not write your name on the sheet. Write the letter which represents the option nearest to your present opinion in the appropriate box. Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

1. To what extent are you aware of the educational aims and objectives of your course?
   a = fully aware b = reasonably aware c = slightly aware d = unaware
   e = can't answer — 1 ☐

2. How do you rate the various elements of your course as learning experiences which are worthwhile to you? (the person issuing the questionnaire will identify the elements using the codes 2A to 2J).
   a = very worthwhile b = worthwhile c = hardly worthwhile
   d = worthless e = can't answer

2A Lectures	2F "Theory of Agriculture"	2A	☐
2B Seminars	2G "Agricultural Botany"	2B	☐
2C Tutorials	2H "Statistics"	2C	☐
2D Practical classes	2I "Agrigultural Economics"	2D	☐
2E Field work	2J "Physical Science"	2E	☐
		2F	☐
		2G	☐
		2H	☐
		2I	☐
		2J	☐

3. What do you estimate to be your average workload per week at the present time? Include all activities which are intended to promote your learning, ie lectures, tutorials, seminars, practicals, professional placements, as well as reading, essay writing and other forms of private study.
   a = less than 30 hours per week b = 30-35 hours c = 36-40 hours
   d = more than 40 hours e = can't answer — 3 ☐

4. Do you consider that your workload is:
   a = excessive b = rather too much c = about right d = too little
   e = can't answer — 4 ☐

5. Do you feel that there is a gap between your experiences of the course and the expectations of your lecturers?
   a = no gap at all b = a slight gap c = a wide gap d = a very wide gap
   e = can't answer — 5 ☐

6. To what extent are you satisfied with your course?
   a = very satisfied b = satisfied c = dissatisfied d = very dissatisfied
   e = can't answer — 6 ☐

7. Are you satisfied with the personal tutorial system?
   (Use categories of question 6) — 7 ☐

8. Should there be more social events?
   a = yes b = no c = can't answer — 8 ☐

9. Should there be more field studies?
   a = yes b = no c = can't answer — 9 ☐

Please hand this questionnaire when completed back to the person issuing it.

COURSE EFFECTIVENESS QUESTIONNAIRE

No. of replies

This questionnaire seeks information about your present course of study. Please answer as frankly as you can. Do not write your name on the sheet. Write the letter which represents the option nearest to your present opinion in the appropriate box. Take 'can't answer' to include 'don't know', 'question not meaningful', 'no single answer suffices' and 'I would need to write an essay to answer'.

1. To what extent are you aware of the educational aims and objectives of your course?
   a = fully aware b = reasonably aware c = slightly aware d = unaware
   e = can't answer

2. How do you rate the various elements of your course as learning experiences which are worthwhile to you? (the person issuing the questionnaire will identify the elements using the codes 2A to 2J).
   a = very worthwhile b = worthwhile c = hardly worthwhile
   d = worthless e = can't answer

3. What do you estimate to be your average workload per week at the present time? Include all activities which are intended to promote your learning, ie lectures, tutorials, seminars, practicals, professional placements, as reading, essay writing and other forms of private study.
   a = less than 30 hours per week b = 30-35 hours c = 36-40 hours
   d = more than 40 hours e = can't answer

4. Do you consider that your workload is:
   a = excessive b = rather too much c = about right d = too little
   e = can't answer

5. Do you feel that there is a gap between your experiences of the course and the expectations of your lecturers?
   a = no gap at all b = a slight gap c = a wide gap d = a very wide gap
   e = can't answer

6. To what extent are you satisfied with your course?
   a = very satisfied b = satisfied c = dissatisfied d = very dissatisfied
   e = can't answer

	a	b	c	d	e
1					
2A					
2B					
2C					
2D					
2E					
2F					
2G					
2H					
2I					
2J					
3					
4					
5					
6					
7					
8					
9					

Please hand this questionnaire when completed back to the person issuing it.

LECTURE EVALUATION

A number of schedules for investigating lectures have been devised and published. In our view most of these are too complicated both for the student completing the list of questions and for the staff compiling the results. There are obviously many different styles of lecturing and these will be perceived differently by students. What matters is the extent to which the objectives of the course are achieved; if there are major factors interfering then it is important for the teacher to know about them.

This schedule is written in a personal style in order to emphasise the personal relationship between teacher and students and to reflect their common purpose.

It is intended for occasional use - for example a third of the way through a course of lectures. This enables any problems which are identified to be followed up during the course itself.

As with other schedules it is expected that this will be a stimulus to open-ended and face-to-face discussions about the teaching and learning processes.

The term ' course objectives ' is used in each of the following schedules and may deserve comment. It embraces all of the learning expectations which staff have for students and thus includes generalised goals, aims and objectives as well as detailed syllabi.

A pro-forma for collating results is printed on page 19.

LECTURE EVALUATION SCHEDULE

The purpose of lectures is inevitably to transfer knowledge from lecturer to students. This is the case irrespective of whether the lecture is intended to arouse interest, to provide factual information or to evaluate ideas and data.

From time to time in a course of lectures, it seems worthwhile to ask 'how's it going?' The following schedule is intended to provide me with some feedback on the effectiveness or otherwise of my series of lectures.

1. How useful are my lectures in helping you to achieve the course objectives?
   a = usually useful b = sometimes useful, sometimes not
   c = rarely useful d = can't answer

2. How do you find my speaking style in lectures?
   a = usually easy to follow b = sometimes easy, sometimes not
   c = often difficult to follow d = can't answer

3. How do you rate my use of aids - blackboard, projectors etc?
   a = usually easy to follow b = sometimes easy, sometimes not
   c = often difficult to follow d = can't answer

4. Do I give appropriate opportunity for student participation in my lectures?
   a = usually b = sometimes c = rarely d = can't answer

5. Is the pace of my presentation right for you?
   a = usually b = sometimes c = rarely d = can't answer

6. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these lectures?

SEMINAR EVALUATION

Seminars are more diverse in nature than lectures, more difficult to conduct, and consequently harder to evaluate. On the other hand, because they entail face-to-face discussion, it may be easier than in lectures to initiate discussion about the educational process itself.

The schedule opposite is designed for occasional use.

Other questions may be helpful in order to elicit views on the amount of preparation undertaken, the relevance to other parts of the course, the availability of reading materials etc.

No schedule on tutorials is included in this booklet because of the wide differences in tutorial practice. Teachers running group tutorials may find that the seminar schedule can be used for tutorial evaluation.

A pro-forma for collating results is printed on page 20.

SEMINAR EVALUATION SCHEDULE

The purpose of seminars is to examine ideas in structured discussions in which each member of the seminar group can participate.

From time to time in a series of seminars it seems worthwhile to ask 'how's it going?'. The following schedule is intended to provide me with some feedback on the effectiveness or otherwise of our seminars.

1. How useful are our seminars in helping you to achieve the course objectives?
   a = usually useful b = sometimes useful, sometimes not
   c = rarely useful d = can't answer

2. How do you rate my involvement in the seminars?
   a = tendency to talk too much b = usually appropriate involvement
   c = tendency to contribute too little d = can't answer

3. Do you feel that our discussions tend to be monopolised by one or two of the group to the detriment of the rest?
   a = often b = sometimes c = no d = can't answer

4. Do you feel that there is an appropriate amount of structure to our seminars? ('Structure' implies logic and purpose in the development of discussion).
   a = discussions tend to be too structured
   b = the amount of structure seems usually appropriate
   c = discussions tend to have too little structure
   d = can't answer

5. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these seminars?

ESSAY WRITING EVALUATION

The extent to which essay writing occurs in a course varies widely: some courses require weekly essays while others may require less than one per term.

In some courses essay writing is linked to regular tutorials - either group or individual - where the essays are planned and subsequently discussed. In other courses there is little staff-student contact beyond the issuing of titles and the returning of scripts with written comments on.

The following schedule is designed to give a tutor some insight into his or her students' perceptions of the educational merit of writing a series of essays. It is for occasional use.

The questions could be modified for regular feedback with each essay, but the problem then is that students might feel that their comments affected the marking.

A pro-forma for collating results is printed on page 21.

ESSAY WRITING EVALUATION SCHEDULE

The purpose of essay writing is to help you to get to grips with the subject matter of the course and to give you opportunities to develop your style and fluency in writing.

From time to time it seems worthwhile to ask 'how's it going?' This schedule is intended to give me some feedback on the effectiveness or otherwise of your experience of essay writing.

1. How useful is the writing of these essays in terms of your getting to grips with the subject matter? ☐

   a = usually useful
   b = sometimes useful, sometimes not
   c = rarely useful
   d = can't answer

2. How useful is the writing of these essays in terms of developing your style and fluency in writing? ☐

   a = usually useful
   b = sometimes useful, sometimes not
   c = rarely useful
   d = can't answer

3. Generally speaking, is relevant reference material for your essays readily available? ☐

   a = usually
   b = sometimes
   c = rarely
   d = can't answer

4. How long on average do you spend altogether in obtaining material in background reading, and in writing up each essay? ☐

5. To what extent are my written or oral comments on your essays helpful in terms of your trying to achieve the course objectives? ☐

   a = usually helpful
   b = sometimes helpful, sometimes not
   c = usually unhelpful
   d = can't answer

6. Have you any other comments which would help you and me to be more effective in working together?

   ☐

PRACTICAL CLASS EVALUATION

This schedule is designed for use in courses in science and in engineering where there are regular practical classes in which equipment is used in accordance with a set of instructions and subsequently a report is written.

A pro-forma for collating results is printed on page 22.

PRACTICAL CLASS EVALUATION SCHEDULE

From time to time in a series of practical classes it seems worthwhile to ask 'how's it going?' The following schedule is intended to provide me with some feedback on the effectiveness or otherwise of our practical classes.

1. How useful are the practical classes in helping you to achieve the course objectives?

   a = usually useful
   b = sometimes useful, sometimes not
   c = rarely useful
   d = can't answer

2. To what extent are the instructions for practical classes clear?

   a = always or nearly always clear
   b = sometimes clear, sometimes not
   c = rarely
   d = can't answer

3. To what extent have you found the equipment to be readily available and in good working order?

   a = always or nearly always
   b = sometimes
   c = rarely
   d = can't answer

4. How long on average do you spend in writing up the results of a practical class?

   a = half an hour or less
   b = one hour or less, but more than 'a'
   c = two hours or less, but more than 'b'
   d = more than two hours
   e = can't answer

5. Have you any other comments which would help make our practical classes more effective?

EXAMINATION EVALUATION

It seems to be much more common for teachers to ask students how they fared in examinations than in lectures and seminars. On the other hand, the use of evaluative schedules about examinations seems rare. Perhaps students have already expressed themselves sufficiently! But, it may be that some viewpoints are revealed by a written schedule which would be otherwise missed.

As with the other schedules, the emphasis is on achievement of course objectives.

A pro-forma for collating results is printed on page 23.

EXAMINATION EVALUATION SCHEDULE

These questions seek your views and experience of the examinations which you have recently taken. Obviously the findings cannot influence the marking of your papers in any way, but they may affect the setting of papers in the future.

1. To what extent do you feel that the examinations have been a fair test of your achievement of the course objectives?

   a) a reasonably fair test
   b) sometimes fair, sometimes not
   c) an unfair test
   d) can't answer

2. Were there parts of the examinations for which the course had not adequately prepared you?

   a) no - all parts covered adequately
   b) yes - a few parts not adequately covered
   c) yes - many parts not adequately covered
   d) can't answer

3. Were the arrangements for the examinations satisfactory? ie timing, facilities, distribution of papers, lack of distraction.

   a) completely satisfactory
   b) reasonably satisfactory
   c) unsatisfactory
   d) can't answer

4. Have you any other comments?

LECTURE EVALUATION SCHEDULE

Course

No. of replies

The purpose of lectures is inevitably to transfer knowledge from lecturer to students. This is the case irrespective of whether the lecture is intended to arouse interest, to provide factual information or to evaluate ideas and data.

From time to time in a course of lectures, it seems worthwhile to ask 'how's it going?' The following schedule is intended to provide me with some feedback on the effectiveness or otherwise of my series of lectures.

1. How useful are my lectures in helping you to achieve the course objectives?
   a = usually useful b = sometimes useful, sometimes not
   c = rarely useful d = can't answer

   a b c d

2. How do you find my speaking style in lectures?
   a = usually easy to follow b = sometimes easy, sometimes not
   c = often difficult to follow d = can't answer

   a b c d

3. How do you rate my use of aids - blackboard, projectors etc?
   a = usually easy to follow b = sometimes easy, sometimes not
   c = often difficult to follow d = can't answer

   a b c d

4. Do I give appropriate opportunity for student participation in my lectures?
   a = usually b = sometimes c = rarely d = can't answer

   a b c d

5. Is the pace of my presentation right for you?
   a = usually b = sometimes c = rarely d = can't answer

   a b c d

6. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these lectures?

   No. of replies with comments

SEMINAR EVALUATION SCHEDULE

Course

No. of replies

The purpose of seminars is to examine ideas in structured discussions in which each member of the seminar group can participate.

From time to time in a series of seminars it seems worthwhile to ask 'how's it going?'. The following schedule is intended to provide me with some feedback on the effectiveness or otherwise of our seminars.

1. How useful are our seminars in helping you to achieve the course objectives?
   a = usually useful b = sometimes useful, sometimes not
   c = rarely useful d = can't answer

   a b c d

2. How do you rate my involvement in the seminars?
   a = tendency to talk too much b = usually appropriate involvement
   c = tendency to contribute too little d = can't answer

   a b c d

3. Do you feel that our discussions tend to be monopolised by one or two of the group to the detriment of the rest?
   a = often b = sometimes c = no d = can't answer

   a b c d

4. Do you feel that there is an appropriate amount of structure to our seminars? ('Structure' implies logic and purpose in the development of discussion).
   a = discussions tend to be too structured
   b = the amount of structure seems usually appropriate
   c = discussions tend to have too little structure
   d = can't answer

   a b c d

5. Have you any other comments which would help you and me to be more effective in trying to achieve the course objectives in these seminars?

   No. of replies with comments

ESSAY WRITING EVALUATION SCHEDULE

Course

The purpose of essay writing is to help you to get to grips with the subject matter of the course and to give you opportunities to develop your style and fluency in writing.

From time to time it seems worthwhile to ask 'how's it going?' This schedule is intended to give me some feedback on the effectiveness or otherwise of your experience of essay writing.

No. of replies

1. How useful is the writing of these essays in terms of your getting to grips with the subject matter?

   a = usually useful
   b = sometimes useful, sometimes not
   c = rarely useful
   d = can't answer

   a b c d

2. How useful is the writing of these essays in terms of developing your style and fluency in writing?

   a = usually useful
   b = sometimes useful, sometimes not
   c = rarely useful
   d = can't answer

   a b c d

3. Generally speaking, is relevant reference material for your essays readily available?

   a = usually
   b = sometimes
   c = rarely
   d = can't answer

   a b c d

   hours

4. How long on average do you spend altogether in obtaining material in background reading, and in writing up each essay?

5. To what extent are my written or oral comments on your essays helpful in terms of your trying to achieve the course objectives?

   a = usually helpful
   b = sometimes helpful, sometimes not
   c = usually unhelpful
   d = can't answer

   a b c d

6. Have you any other comments which would help you and me to be more effective in working together?

   No. of replies with comments

PRACTICAL CLASS EVALUATION SCHEDULE

Course

No. of replies

From time to time in a series of practical classes it seems worthwhile to ask 'how's it going?' The following schedule is intended to provide me with some feedback on the effectiveness or otherwise of our practical classes.

1. How useful are the practical classes in helping you to achieve the course objectives?

   a = usually useful
   b = sometimes useful, sometimes not
   c = rarely useful
   d = can't answer

   a b c d

2. To what extent are the instructions for practical classes clear?

   a = always or nearly always clear
   b = sometimes clear, sometimes not
   c = rarely
   d = can't answer

   a b c d

3. To what extent have you found the equipment to be readily available and in good working order?

   a = always or nearly always
   b = sometimes
   c = rarely
   d = can't answer

   a b c d

4. How long on average do you spend in writing up the results of a practical class?

   a = half an hour or less
   b = one hour or less, but more than 'a'
   c = two hours or less, but more than 'b'
   d = more than two hours
   e = can't answer

   a b c d

5. Have you any other comments which would help make our practical classes more effective?

   No. of replies with comments

EXAMINATION EVALUATION SCHEDULE

Course

No. of replies

These questions seek your views and experience of the examinations which you have recently taken. Obviously the findings cannot influence the marking of your papers in any way, but they may affect the setting of papers in the future.

1. To what extent do you feel that the examinations have been a fair test of your achievement of the course objectives?

   a) a reasonably fair test
   b) sometimes fair, sometimes not
   c) an unfair test
   d) can't answer

   a b c d

2. Were there parts of the examinations for which the course had not adequately prepared you?

   a) no - all parts covered adequately
   b) yes - a few parts not adequately covered
   c) yes - many parts not adequately covered
   d) can't answer

   a b c d

3. Were the arrangements for the examinations satisfactory? ie timing, facilities, distribution of papers, lack of distraction.

   a) completely satisfactory
   b) reasonably satisfactory
   c) unsatisfactory
   d) can't answer

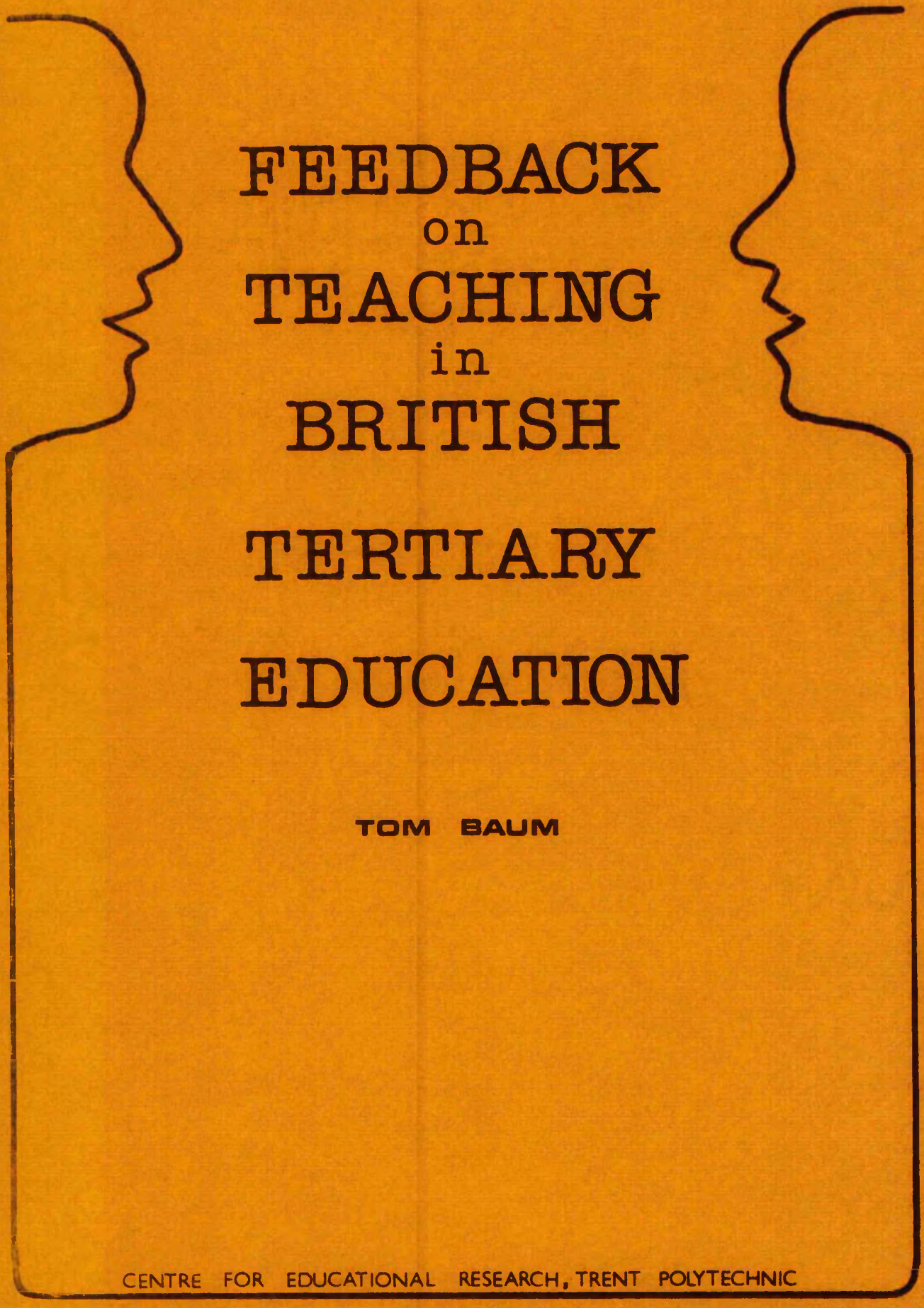
   a b c d

4. Have you any other comments?

   No. of replies with comments

APPENDIX FOUR

Publications relating directly to the project.



FEEDBACK on TEACHING in BRITISH TERTIARY EDUCATION

TOM BAUM

CENTRE FOR EDUCATIONAL RESEARCH, TRENT POLYTECHNIC

F O R E W O R D

Tom Baum's work as an RAD (research-assistant-demonstrator) in the Polytechnic has been concerned with ways of improving communications between staff and students about the processes of teaching and learning. Much of his time has been devoted to the use of feedback questionnaires along lines described in a previous paper, "Communication about Communication". The present paper sets his work in the context of the three major forms of feedback which have developed so far in Britain.

This paper was presented to a conference organised jointly by the Society for Research into Higher Education and Trent Polytechnic on 23 May 1979.

Michael Bassey
19 June 1979

A significant feature of the contemporary situation in further and higher education is the increasing level of accountability with which teachers are faced. Economic stringencies coupled with the growing "consumer" consciousness of the student body has created a situation in which the teacher is required to justify his methods and general approach to teaching in a way that is largely alien to the traditional approach to teaching in this country. The teacher today is less able to maintain the "splendid isolation" within his classroom and one consequence of this has been the mushrooming of interest in the idea of obtaining feedback on a teacher's activities. Research and development work in this area in the United States dates back to the early years of this century but in Britain it is a comparatively recent phenomenon. Evidence for the current concern about this issue includes a growing number of research projects in this field, a proliferation of publications and an increasing number of conferences. The main emphasis of this activity has until very recently been exclusively in the higher education sector but there is evidence of a growing concern in further education; notably activities of the NASD and their recent conference on "The realities of staff appraisal in further education". The intention of this paper is to discuss some of the main approaches that can be adopted in obtaining feedback on teaching and to describe in detail a number of projects which are representative of the kind of work currently being undertaken in this country.

Feedback is part of teaching. The teacher constantly seeks clues and indications about how things are going, he is on the lookout for the reactions of his class to the teaching programme, he gains indications of student opinion through corridor gossip or coffee bar discussion, he gleans clues by essay and examination marks, and sometimes he may call upon the advice and experience of colleagues. These processes will be familiar to most teachers in further and higher education and operate automatically on many courses. The main drawback to this form of informal and ongoing feedback on teaching is that the teacher has no indication about its reliability or whether the clues he picks up are representative of the way in which his teaching is seen by the body of students and colleagues.

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Additionally, teachers may attempt more systematic approaches to obtaining feedback on their teaching. They may arrange for the audio or visual recording of a teaching session and use this evidence in an attempt to identify problems in teaching style or in methods of communication with students. They may adopt a form of self-analysis in this by evaluating the recording on their own, or they may invite experienced colleagues to comment and advise. Similarly, student evaluation or feedback exercises at "chalk face" level are very widespread among teachers in this country. In a recent survey at Trent Polytechnic, it was found that a high proportion of staff had undertaken an exercise of this nature at one time or another in their teaching career. They tend to be "one-off" exercises, designed to obtain specific information about a particular course taught individually or by small groups of colleagues. Evidence from the study suggests that frequently the instruments are put together in a somewhat haphazard manner with the inclusion of a very mixed assortment of questions. A teacher may use a widely tested instrument as the basis for his own, discarding or adding items as he sees appropriate. Discussion with a number of academics who have undertaken such evaluations has indicated that there is frequently a feeling of dissatisfaction with the actual instrument as well as with the results and the use to which they can be put. Consequently, such exercises may not be repeated and teachers may by reluctant to become involved in those of others or to attempt new initiatives of their own. Peer feedback on teaching also tends to be a "one-off" exercise. The teacher may invite a colleague to sit in on one of his sessions and to note down particular problems. These may then be discussed and appropriate action initiated.

Exercises such as those described above clearly constitute the "bread and butter" of feedback on teaching. To some degree they will be familiar to most teachers in further and higher education. The intention of this paper, however, is to discuss a number of systematic schemes which have attempted a larger scale of operation and where a recognised and fairly standardised procedure can be identified for the exercise. These schemes are fairly representative of the kind of work on feedback on teaching currently being undertaken in this country. Theyare described so as to enable a teacher wishing to obtain some kind of feedback on his teaching to utilise

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the experience of others and to identify the methodology which will be most appropriate to his own circumstances. In this paper, feedback on teaching will be classified under three very general headings.

a) Utilisation of student opinion
b) Peer group appraisal
c) Self-examination techniques

Student opinion as a source of feedback

By far the most common form of systematic feedback on teaching is obtained from students, usually in the form of a questionnaire which seeks their evaluation and/or comments on a particular teacher, on a specific course or on more general issues pertaining to the academic experience of the student. In the United States the use of student evaluation of teaching is widespread, as indicated by Flood Page's monograph (1974). Aspects of the "American experience" undoubtedly made many teachers in this country very wary of the use of evaluation of teaching, notably implications that the findings of a student rating exercise may be used to reach decisions relating to a teacher's promotion or tenure in an institution. In this country there is some confidential evidence that a few colleges are considering the use of student opinion as part of the general staff review procedures. Suggestions of this nature are usually greeted with concern by teachers. However, the schemes which are described in this paper are in no way intended for this purpose and all seek to provide a perspective on teaching which may enable a degree of teaching improvement to take place. That is not to say that work in the United States has not influenced a number of schemes in this country. Typical among these is the Assessment for Instructional Development (AID) scheme initiated at Newcastle upon Tyne Polytechnic by de Winter Hebron. Initially this project centred on attempts to adapt IDEA (Instructional Development by Evaluation and Assessment), a scheme which originated at Kansas State University, to the British situation. IDEA is one of the more widely used and more sophisticated student rating programmes in the United States and its more unusual features include:

(1) the manner in which student perceptions of teacher are related to student perceptions of their own progress in relation to a range of objectives;

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(2) ... manner in which the significance of the objectives ... determined by individual teacher choice;

(3) empirical derivation of both objectives and teaching behaviour; and

(4) the very large data base on which IDEA depends which enables more valid statistical influences about behaviour, progress and relationships to be made.

Attempts to adapt IDEA to the British situation confirmed fairly widespread concern about the feasibility of cross-cultural transfer of student rating schemes. It was anticipated that field trials would show:

(1) that the instrument would be a practical one to administer;

(2) that questions would need some superficial rewording, but not much other alteration; and

(3) that British and American scoring and therefore norms would be similar.

However, only the first of these assumptions was completely confirmed. Terminology presented a number of transfer problems, while the norms achieved in the trial run showed virtually no similarity to those gained in the United States. Consequently the AID programme has required a completely fresh start. This has not been completed and as a result a feedback instrument is not yet available. However, the initial stages have involved the identification of 46 behavioural aims, stated in sentences relating to teaching in higher education. These were rated for importance by a sample of 81 teachers working in 7 discipline areas - humanities, education, arts and design, social studies, business studies, engineering and science. The aims were broadly divided into 4 types, cognitive, affective, psychomotor and instrumental. Examples of such sentences include; "Be aware of how students acquire new knowledge" (cognitive); "Organise ... " (affective); "Assemble apparatus" (psychomotor); and "... develop repertoire of professional skills" (instrumental). Considerable variation in importance rating was attached to the aims by

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the teachers in the different discipline areas and it is intended that through further testing individual discipline questionnaires can be developed in which student perceptions and evaluations can be compared with those of first their own teacher and secondly the concensus of perceptions of a large number of teachers in that discipline area.

Probably the best known scheme indigenous to this country is the Student Feedback Project at the North East London Polytechnic. The project was established in 1973 and has two major features. First there is the teaching evaluation scheme which is based on a 23 item rating scale questionnaire which has a computer programme developed for analysis of data from it. The questionnaire invites students both to rate the teacher against various teaching activities and to indicate the importance which they attach to the teaching activities themselves. Items cover a wide perspective of students' learning experiences, covering both practical and factual aspects of the teachers' performance as well as features of attitudes. The two elements of student rating are fed back to the teacher, no overall rating is given and nor is the teacher compared with other teachers or against any norms. A data bank of alternative questions is available to a teacher who considers the basic questionnaire inappropriate to his needs. In practice changes of this kind have been rarely implemented. The second part of this student feedback project has involved a scheme of course evaluation where purpose-built questionnaires have been devised after discussions with staff and student to obtain feedback on courses of particular parts of courses especially where innovations or difficulties were involved. The questionnaires and other feedback information are analysed by staff on the project and an interpretative report is prepared. The NELP scheme has exercised considerable influence over a number of other student feedback projects in this country and both the evaluatory model adopted and a number of the actual questions used have been adopted by others.

Concern with the survey type of student feedback mechanism, especially the larger scale systems such as IDEA, led to the evolution of a rather different approach at Plymouth Polytechnic, under the direction of Terry Keen and Warren Hopwood. The Teaching Appraisal by Repertory Grid Elicitation Techniques (TARGET) project is

concerned with teaching appraisal using students as the main source but that is claimed to be the only similarity with other systems. Teachers themselves are not classified as good, bad, effective or ineffective. Teaching evaluation can only take place in the context of the whole teaching and learning interaction. Keen and Hopwood argue that the teacher's pedagogic style may be eminently suited to one group of students but be totally unsuccessful with another. The TARGET analysis is an attempt to identify those skills which are required in the teaching of a particular group of students. The system is entered on a data bank based on information collected from a large representative sample of students and teachers within a discipline area. This shows similarity with the AID programme. Data banks are developed through the use of repertory grid techniques and the perceptions of both teachers and students as to what constitutes "effective" and "ineffective" teaching are obtained. Teachers are able to compare their own profiles as perceived by themselves and their students with the discipline norms, and, as a consequence can decide on measures to remedy faults within the context of their own repertoire of skills so as to maximise their effectiveness. TARGET offers an unusual perspective on the appraisal of teaching and is of particular interest in its recognition of the diversity of skills which constitute effective teaching. The aim of the evaluatory programme is to enable a teacher to maximise the effect of his pedagogic strengths and compensate for weaker areas and, in addition, to suit his approach to the demands of a specific group of students with whom he is working.

The Teaching Analysis Project on which I am working at Trent Polytechnic exhibits a similarity with the TARGET scheme in its recognition of the over-riding diversity in teaching, a variation which I believe to be of greater significance than any uniformity which is assumed in many teaching evaluation and feedback programmes. While not adopting an out-and-out phenomenological stand point, an assumption is made that every teaching/learning situation is unique and cannot be meaningfully related to the situation on other courses, or indeed, to the situation at other times within the duration of a single course. The emphasis of the project is on the use of simple feedback questionnaires. These are intended to identify issues of concern to students on a particular course so that discussion

can be facilitated between a teacher and his students with a view to lessening or even eliminating difficulties. Questionnaires are not intended to supplant the day-to-day discussion about such issues which sometimes takes place between a teacher and his students; the questionnaires are intended to assist in situations where such discussion is not easy; for example, where a large class is involved. The questionnaires are intended as diagnostic tools acting as facilitators of discussion. My research evidence suggests that student opinion is often transitory, and that any evaluatory scheme should take account of this and treat ratings as an immediate indicator rather than an absolute picture of student perception. The schedules are developed by the teacher, so that the main areas of concern can be included and the appropriate terminology adopted. Importance is attached to the immediate availability of the results and consequently complex statistical analysis is not attempted. Teachers are encouraged to discuss results with students so as to obtain more detailed comments about particular points. In addition, simple validation techniques have been tested to enable teachers devising their own questionnaires to avoid some of the major pitfalls relating to ambiguity in the meaning of questions; these techniques are not time consuming to undertake. They include discussion with a few students about each question, asking students to redefine each question in writing to determine consistency in perception and taped verbalisation of student thoughts while responding. These procedures are a pragmatic response to the general lack of validation attempted with small scale student feedback questionnaires.

Peer group appraisal

By contrast with the number of projects which utilise student opinion as the source of feedback on teaching, there is a paucity of published material about feedback in the other two areas under discussion in this paper. While feedback from peers may be frequent at an informal level, only one project - at the University of Birmingham - has been identified for which published material is readily available. It is known, however, that at Ealing College of Further Education, new members of staff are encouraged (but not required) to pair with a new colleague in order to sit in at each other's lectures as observers and discuss their impressions. This is a personal activity and reports are not made to the scheme's organisers. The best known peer evaluation scheme in the U.K. is

that run under the auspices of the Advisory Service on Teaching Methods within the University of Birmingham. The evaluation takes the form of a detailed assessment of students' reactions to a particular course. This is normally carried out by a colleague whose own course is evaluated on a reciprocal basis. Normally the two teachers involved are from similar but not identical discipline areas so that they are able to understand the subject matter under discussion in the teaching session. It clearly would be difficult for a historian to evaluate usefully the work of an applied physicist or vice versa. The evaluation model varies from course to course but usually involves the evaluator attending some lecture and practical classes or other components of the course. This is followed by informal discussion with the evaluated teachers as well as with one or more small groups of students who are taking the course. These discussions seek to identify the problems that the students encounter and frequently lead to the construction of a detailed questionnaire which the whole student body complete. A report is then prepared for the evaluated lecturer by his visiting colleague. Occasionally a follow-up exercise may be carried out later in the course so that, for example, information may be obtained from students on the effect of changes made by a lecturer in response to the previous evaluation. The exercise is entirely confidential and is not seen as a means of assessing professional competence in relation to promotion or probation. Teachers are in no way obliged to share the evaluation with others but are encouraged to do so. The main drawback of the scheme is the high input which is demanded in terms of teacher time. The most striking benefit is said to be the effect which evaluating a colleague has on the teaching of the evaluator himself. In seeking to identify the problems encountered by a colleague, a teacher is encouraged to focus his thoughts on his own teaching and to assess the effectiveness of his own work. Peer feedback has been criticised on the grounds that the presence of the observing lecturer will automatically alter the teaching situation.

Self examination techniques.

On self examination there is also a dearth of published material. Many teachers probably sit down after a lecture, seminar or practical class and reflect on how it went. Systematic schemes to assist in this process are not common. Self-evaluation is inevitably fraught with a number of problems, notably the tendency of an individual to

judge himself either more favourably or more destructively than others would. An example of self-evaluation programme is John Clarke's Tutor Self-Evaluating Questionnaire, developed at Leicester Polytechnic. This schedule poses a number of questions about a particular teaching session, to be answered immediately following the ending of the class. By answering the questions it is hoped that "the teacher will provide for him/herself a more detailed matrix of impressions and will thereby more equally recognise successes or failures and, by the process, describe for him/herself the necessary changes".

Clarke's scheme depends on remembering how a particular session went. Dennis Fox at Trent Polytechnic has developed a different approach to self-appraisal. His Lecture Analysis scheme involves the audio-recording of a lecture session. Afterwards the lecturer plays the recording back to himself, at the same time trying to imagine himself in the position of the student listening to the lecture. The programme requires the teacher to rate and comment on his performance as the lecture progresses. A detailed analysis of the first 5 minutes is required and then the identification of more general points during the remainder of the session, e.g., the extent to which examples are provided, the time allowed for note taking, and the manner in which unfamiliar ideas are explained. This procedure may be of considerable use to a new teacher. Experienced teachers are probably more aware of things that are going wrong, but this self-analysis technique helps the inexperienced to pinpoint those areas of teaching which deserve particular attention.

This survey has considered three main areas of feedback on teaching. The nature, scope and the use of feedback on teaching is a contentious issue in further and higher education today, but if it is used by teachers themselves, as a tool to improve their teaching, it can do nothing but good.

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June 1979

FEEDBACK ON TEACHING: a source list.

Project/Publication	Contact address
AID project	Chris de Winter Hebron, Dept. of Humanities, Newcastle Polytechnic, Lipman Building, Sandyford Road, Newcastle upon Tyne.
As Assessment Scheme for the Lecture	E. Hall, Dept. of Education, University College of Wales, Cambrian St., Aberystwyth, Dyfed.
Brief Introductions: Effectiveness of lectures; Questionnaire design	Educational Services Unit, University of Bath, Claverton Down, Bath, Avon.
Communication about Communication	Centre for Educational Research, Trent Polytechnic, Burton Street, Nottingham.
Evaluating Motivational Videotapes	K.J. Adderley, Educational Development Unit, Brighton Polytechnic, Moulsecoomb, Brighton.
Evaluation Questionnaire for Lectures	UTMU, 55 Gordon Square, London WC1.
Final Year Students Questionnaire	Dr. I. Seeley, Dept. of Surveying, Trent Polytechnic, Burton Street, Nottingham.
IDEA	Centre for Faculty Evaluation and Development in Higher Education, 1627 Anderson Avenue, Box 3000, Manhattan, KS 66502, U.S.A.
Improve your Lecturing/Lecture Analysis	Dennis Fox, Dept. of Professional Studies, Trent Polytechnic, Burton Street, Nottingham.
10. Lecture Feedback Project	David McConnell, I.E.T., University of Surrey, Guildford, Surrey.
11. Student Evaluation of Instruction	M.J. O'Neill, Centre for Teacher Education, Teeside Polytechnic, Flatts Lane, Normanby, Middlesborough, Cleveland.

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12.	Student Feedback Questionnaire/ Tutors Self-evaluating Questionnaire	John Clarke, Centre for Educational Development, Leicester Polytechnic, Leicester.
13.	Student Instructional Report/ Self-report Form for Instructors	Educational Testing Service, Princeton University, Princeton, New Jersey, U.S.A.
14.	Students' Opinions of Lectures	Educational Services and Teaching Resources Unit, Murdoch University, Murdoch, Western Australia, 6153.
15.	TARGET	Warren Hopwood, Learning Resources Centre, Plymouth Polytechnic, Drake Circus, Plymouth, Devon.
16.	Teaching Effectiveness Inventory	Sean Boyle, c/o Dept. of Occupational Psychology, Birkbeck College, Malet Street, London WC1.
17.	Vorlesungsfragebogen (lecture questionnaire)	As number 1.

10.	The questions are clear, the exams, papers and/or projects have instructional value and give a fair indication of mastery of the material.	1 2 3 4 5 6
11.	The instructor is available for consultation with students.	1 2 3 4 5 6
12.	The instructor's preparation for each class is appropriate.	1 2 3 4 5 6
13.	This course has increased my learning, has given me new viewpoints and appreciations, has increased my capacity to think and to formulate questions.	1 2 3 4 5 6
14.	This course has given me knowledge and skills which I expect to be able to put to professional use.	1 2 3 4 5 6
15.	The instructor uses class time well.	1 2 3 4 5 6
16.	The instructor informs students how they will be evaluated in the course.	1 2 3 4 5 6
17.	This course has given me knowledge and skills which will help me deal with and comprehend day-to-day events or phenomena.	1 2 3 4 5 6
18.	There is agreement between the stated objectives of the course and what was actually taught.	1 2 3 4 5 6
19.	The instructor covered the material at an appropriate pace.	1 2 3 4 5 6
20.	This course, as taught by this instructor, is one that I would recommend.	1 2 3 4 5 6

COMMENTS:

Paper for the 5th International Conf. on Improving University Teaching, London 1979.

STUDENT EVALUATION OF TEACHING: SOME ALTERNATIVE PERSPECTIVES

Tom Baum
Trent Polytechnic

ABSTRACT

This paper is a response to the considerable criticism which has been levelled against the use of student evaluation of teaching in higher education. Much such criticism is justified when applied to a considerable proportion of the work in this field. Student evaluation has evolved, in part, as a response to demands for greater "consumer" involvement in higher education.

In Britain the educational climate is such that interest in student evaluation has been slow to evolve and has been constrained by the system and the position of the teacher and student in the academic community. Consequently, British initiatives in student evaluation display interesting innovative features, which are direct responses to the situation in this country and, to some extent, circumvent the main criticisms of evaluations. A number of such schemes are described in the paper, including the author's own work at Trent Polytechnic. The development and thinking behind this project is described and two case studies from the field trials are outlined. Simple validation procedures for feedback questionnaires are described which can be utilised by teachers developing their own schedules.

Student evaluation of teaching: some alternative perspectives

Student evaluation of teaching has been the target of considerable criticism in recent years. Consequently there has been a tendency to reject the use of such feedback in higher education. Many schemes undoubtedly warrant the criticism levelled but this is by no means universally so. The intention of this paper is to describe a number of British projects which succeed in circumventing some of these problems. In particular, the author's work at Trent Polytechnic will be described in some detail.

As the elitism of higher education throughout Western Europe and North America has torturously and unwillingly clad itself with the outer garments of populism, so the student or consumer view has been increasingly sought. Cynics argue that, by involving students in the rating of courses and teachers, the educational establishment is offering a sop to involvement. Accepting the evident and well documented criticisms of student ratings, academics and administrators none-the-less employ them because students demand involvement in their education and formal ratings offer a democratic and ubiquitous opportunity for students to "have their say". As is the case with, for example, student representation on college bodies, it is easy to see student ratings as mere tokenism, in particular where the intention is to provide indications of a teacher's effectiveness compared with colleagues and when promotion and tenure decisions may be based, in part, on such ratings. The teacher himself, senior academics and administrators have the powerful defence mechanism, even if they do not consciously use it, of rejecting the findings of a student evaluation exercise on the grounds of

the well known and widely accepted weaknesses inherent in the procedure.

The case for the use of student ratings in the United States and elsewhere has undoubtedly been devalued by indiscriminate overkill and the use of what are, frankly, poor instruments, which provide ideal fodder for the criticisms of the "anti-raters". Nadeau[1] (1977) lists thirty-four major criticisms of the use of student ratings of instruction, all of which have indisputable validity within the context of the American experience and, indeed, make an instructive list of "do nots" for intending users of student evaluation. In Britain, as has been the case in many other fields, we have had the good fortune to have been very slow in latching onto the idea of structured student feedback and thus have been able to avoid some of the major pitfalls encountered elsewhere. Attempts to develop materials and to adapt American versions in Britain have inevitably been coloured by the peculiarities of the higher education system in this country, in particular academic independence, professionalism and the position of the student, not as consumer but member of the academic community.

As a consequence, proponents of the usefulness of student evaluation of teaching, for whatever purpose, have been required to develop complex justifications for their proposals which can in no way conflict with the consensus mores of the institutions concerned. Student evaluation at "chalk face" level has been undertaken by individual teachers in Britain for a number of years, but larger scale schemes have been a fairly recent development. Despite the fairly widespread problems which faced evaluators when seeking to instigate large scale and formalised systems of student feedback or

ratings of teaching in Britain, the constraints have, paradoxically, resulted in the development of a number of innovative schemes, which do not justify, to the same extent, the kind of criticisms which are frequently levelled against student evaluation programmes and represent direct responses to the unique educational environment in Britain. While in many ways they are very different, what these projects have in common is a fundamental concern for improvement in the teaching-learning process in higher education and the belief that student evaluation can act as an important facilitating agent in the achievement of this imporvement.

Probably the best known student evaluation programme in Britain is the Student Feedback Project undertaken by Bradbury and Ramsden[2] at North East London Polytechnic. Working with individual lecturers, responses were sought from students to 23 statements about the teaching of that particular teacher. In addition students were required to provide an assessment of the importance of each of the selected dimensions and this section was used to assist in the interpretation of the results of the main evaluation. Central features of the NELP programme are that use by academic staff is entirely voluntary, the schedule is flexible, and that the results of the evaluation questionnaires are confidential to the participating teacher, to enable him to find out more about his teaching. It is this emphasis which appears to be the main attraction of the NELP programme to academic staff in Britain. In other respects, especially in terms of the type of question used and the range of responses available, the questionnaire does not appear to be particularly innovative and adopts an approach similar, in many respects, to U.S. programmes such as IDEA. A number of other schemes in Britain have been modelled on the work at NELP, notably

the Student Feedback Questionnaire, developed by Clarke[3] at Leicester Polytechnic. This package also seeks information on aspects of the teaching strategy adopted on a course as well as details of specific problems encountered. Clarke developed the package to assist colleagues to monitor their own teaching at a personal level as well as in conjunction with the expertise offered by his staff development unit.

Very different in operation to the NELP and Leicester Projects, but exemplifying a novel approach to the use of student evaluation, is that developed at the University of Birmingham[4]. The central feature of the programme is two-way peer evaluation by colleagues in related disciplines by which a reciprocal evaluation is initiated to encompass all facets of the teaching-learning process on a course. An important confirmatory process which has featured in this programme, subsequent to the observational peer assessment, has been the use of a specially designed student evaluation questionnaire, constructed as a result of the initial evaluation and therefore tailored to the perceived problems on a course. As a consequence, the resulting questionnaires exhibit considerable variety in content and the emphasis placed on particular areas of concern to students, as noted by observation and interviews, and they are thus seen by students as pertinent to their own experiences. The scheme is an illuminating example of the way in which various evaluatory techniques can be combined to produce a composite of considerable value to the teacher.

Concern with the survey-type of student feedback mechanism, especially at attempts to import American systems such as IDEA, led to the evolution of a completely different approach at Plymouth

Polytechnic under the direction of Keen and Hopwood[5]. Their TARGET project is concerned with teacher appraisal but that denominator, the authors claim, is the only similarity with other systems. No attempt is made to classify or quantify teaching into categories such as good, bad, effective or ineffective. Keen and Hopwood argue, a teacher's pedagogic style may be eminently suited to one group of students but be totally unsuccessful with another. The TARGET analysis is an attempt to identify those skills which are required in the teaching of a particular group of students. Repertory Grid techniques are used to obtain teacher and student perceptions of "effective" and "ineffective" teachers which form data banks for different disciplines. Teachers are able to compare their own profiles, as perceived by themselves and their students, with the discipline norms and, as a consequence, can decide on measures to remedy faults within the context of their own repertoire of skills so as to maximise their effectiveness. TARGET undoubtedly offers an unusual perspective on the appraisal of teaching and is of particular interest in its recognition of the diversity of skills and combinations of skills which constitute effective teaching, which enable a teacher to maximise the effect of his own strengths.

This recognition of the diversity within the teaching situation is a central tenet of my own project at Trent Polytechnic. While not adopting an out and out phenomenological stand point, the Teaching Analysis Project is underpinned by the assumption that the teaching/learning situation on every course is unique and cannot be meaningfully related to experiences with other courses. Comparative analysis has been rejected because of its complicating effect and the fluctuating nature of student perceptions. Because student evaluations are only a realistic measure of the immediate situation,

end of course or summative evaluations have not been adopted and the emphasis has been on the on-going, remedial value of formative feedback.

The starting point of the Teaching Analysis project was the identification of a communication "gap" between the perceptions of students and the expectations of their teachers in higher education. This gap is a multi-causal and dimensional phenomenon, the features and extent of which vary considerably between courses and within courses at different times. The gap may be a manifestation of a major disparity or even conflict between the perceptions of a teacher and his students. More frequently, however, it results from fairly low-level, possibly trivial problems on a course which are allowed to fester and act to the detriment of the overall effectiveness of the course, and have adverse consequences to the learning of the students.

The widespread presence of the hypothesised "gap" in higher education was confirmed by means of a large-scale survey of staff and students at Trent Polytechnic. The focus of the project now centred on developing mechanisms which would enable teachers to identify the nature and causes of the gap, if it is evident, on their course and consequently to attempt to deal with it. While in an ideal situation a teacher and his students would have the kind of rapport which would enable issues and problems to be discussed in a frank and constructive manner, the practicalities of the teaching situation in higher education make this a rarely achieved model. In this situation there is a need for a communication facilitator, a mechanism which may enable purposeful face-to-face discussion to be undertaken.

The mechanisms which were selected to facilitate such discussion were simple student feedback questionnaires, designed to identify areas of concern to students in a course overall and in terms of specific aspects of it, for example laboratory sessions, lectures and seminars[6]. A fundamental feature of the questionnaires is that they are intended to be adapted or extended to suit the specific needs of the course in question. The questionnaires are intended for class administration and attempts are made to maintain the collation of results at a manageable level. Complete confidentiality is essential and results are intended to be exclusively for the individual teacher or group of colleagues on a course.

Two case studies illustrate the ways in which the student feedback package can be utilized. The first involved an individual teacher who had recently taken over responsibility for a unit within an applied science course, comprising lecture and laboratory based sessions. The overall course effectiveness questionnaire was modified to suit the current terminology and the teaching situation of the course. The evaluation indicated general satisfaction with the lecture based section of the unit but concern with the laboratory sessions. This concern was probed by means of a questionnaire seeking more detailed information on student reactions to the laboratory sessions in general and followed subsequently by the use of a short feedback instrument which students completed in relation to each session and returned to the tutor at the same time as the experiment notes. The teacher now provides detailed notes on the objectives of each laboratory class and the association of experiments with the lecture material and this is discussed at some length at the beginning of each session, and the re-planning of the

unit has been influenced by the exercise.

The second case study involved a team of colleagues teaching one year of an applied science course in the Polytechnic. A revised form of the overall course effectiveness questionnaire was administered in class and, with the agreement of both students and teachers, the results were presented at the departmental staff-student forum. Previous meetings had been noted for the irrelevant and low-level discussion, with staff disinterested and students speaking individually and not expressing representative views. The evaluation provided a directly relevant focus for discussion and each of the main issues were debated at some length, some criticisms were accepted while in relation to others, teachers were able to justify and explain their position. The consensus of the meeting was that the evaluation provided the basis for a level of discussion which previous meetings had totally failed to achieve.

These two case studies illustrate possible user models for the student feedback package developed at Trent Polytechnic. The system has been tested in a variety of disciplines and in differing types and levels of courses in the Polytechnic and elsewhere and in no cases were the procedures identical. The management benefits of standardisation as well as the value of rigorously tested instruments, are lost, to some extent, in the evaluation model which was adopted. The main benefits which do accrue from this approach include the use of instruments directly pertinent to the teaching situation in question, a consequent feeling of commitment and enthusiasm among both teachers and students, a flexible programme which allows for specific issues to be followed up as they arise and the personal control which the individual teacher maintains over

the whole operation.

Concern about the use of instruments without the rigorous validation programme which is normally applied to student feedback questionnaires resulted in the development of simple techniques to enable teachers to undertake a degree of simple validation of the questionnaires they intend to use which is not time consuming or dependent upon external assistance. These procedures include small group discussions with students about each question, asking students to redefine each question in writing to determine consistency in perception, a similar procedure based on taped verbalisation of student responses and interpretations of each question and a validation situation based on the pairing of respondents by which one student records the main features of his partner's verbalised reactions to questions. These procedures are not intended to replace more rigorous conventional validations but offer the busy teacher an expedient way of avoiding some of the pitfalls associated with the construction of student feedback instruments.

This paper is a response to the widespread criticism which has been levelled against the use of student evaluation of teaching in higher education. Many of the concerns expressed are justified in terms of some current practice in the field. The intention of this paper has been to illustrate attempts in Britain to overcome some of the undoubted problems associated with student evaluation. The Nadeau criticisms of student evaluation, referred to earlier, have only limited applicability to the work described in this paper. Undoubtedly, however, the British projects will elicit a different order of criticism in their own right. The schemes described are by no means flawless but they certainly represent initiatives

which, while not unique, suggest that student evaluation is not dead and should not be dismissed completely without the careful consideration of alternative approaches.

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FEEDBACK ON TEACHING: SOME CASE STUDIES FROM PART-TIME AND SHORT COURSES

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"Education Improves Your Life" parades an advertising appendage to the postage franking machine used by a Minnesota State University. This may be so. But like so many other social and health services in this country, education is currently facing the consequences of economic recession in the form of stringent cut-backs and even closures. This is true at all levels but particularly so at the tertiary level, where courses at the university, polytechnic and further education level must be seen as particularly vulnerable.

An inevitable consequence of this situation is the increased level of accountability with which teachers will be faced, both by the economic demands of their employers and the "consumer" concerns of their students. The teacher may have to justify his methods and general approach to teaching and will be less able to maintain the "splendid isolation" within his classroom which has been a traditional prerogative in this country. Both as a response to external pressure and, hopefully, as a means of improving his own professional performance, the teacher may seek feedback from all available sources on his teaching, by systematic evaluation of his own impressions, by reference to colleagues or by use of student opinion. Within the main stream of tertiary education, developments in this field are fairly well advanced and I have documented aspects of them recently elsewhere.† However, work which is of relevance to the part-time and short course situation, with its undoubtedly differing demands, is exceedingly limited although the problems faced by this sector are similarly acute; indeed, it is arguable that it is just these areas which are most vulnerable to contemporary developments and where the issue of accountability may well loom largest.

During the period 1976-79, the author worked on a Student Feedback Project at Trent Polytechnic. The main purpose of the project was to develop techniques and materials to enable teachers to facilitate improved communication with their students on the full-time courses. However, a spin off during the project was involvement with a number of part-time and short courses, in which the purpose and format of the feedback exercises were very different. The intention of this

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† In Baum, T., Feeback on Teaching in Teaching in British Tertiary Education, Centre for Educational Research, Trent Polytechnic, 1978.

paper is to describe three of these initiatives so as to indicate possible approaches to obtaining and using feedback for the teacher on part-time or short courses. Fundamental to the project in general were the beliefs that information a teacher obtains should be exclusive to him and his students, that the procedures should be simple and that the usage should be of a formative rather than a summative nature.

In many respects, part-time and short courses have similar features and pose like teaching problems to normal full-time courses. Approaches to teaching are similar and the aims of the courses include a similar wide disparity. However, there are crucial differences. The characteristics of the student body will tend to differ from those normally to be expected on a full-time course and it is reasonable to suppose that the motivation and raison d'etre of the students will likewise have less in common with students in general than with the colleagues in the work situation where most of them normally operate. Teachers on part-time or short courses have less opportunity to establish a working relationship with their students, and consequently problems are less readily identified or ironed out. It is because of these differing conditions that feedback exercises were undertaken which vary in a number of respects from those which might have operated with full-time courses.

The first example involved a two year in-service course for teachers in further education. The particular unit was taught in a number of blocks during the first year, alternating with other options on the weekly course afternoons. When faced with this somewhat disjointed programme, the teacher contacted the author with a view to initiating some form of feedback exercise as part of the course. The idea was in part intended to assist the teacher himself in identifying some of the problems which his students faced while at the same time focusing the attention of the students (practising teachers, remember) on ways in which feedback on teaching can be sought and acted upon. The first step was the administration of a fairly general questionnaire about the course which was completed anonymously. The results, fairly favourable, were discussed extensively by teacher, students and the author and alternative approaches to the collection of information, especially with smaller groups, were discussed.

Particular interest was shown in self-assessment check lists and in peer evaluation, soliciting the co-operation of a colleague to comment on teaching sessions. The students were encouraged to try out these techniques as well as modified versions of the questionnaires developed during the project with their own classes. These exercises were of mixed success but served the purpose of identifying possible feedback procedures to the students. The long-term value to the students cannot be anticipated; if at all, this will be reflected in the future classroom operation of these teachers. From the point of view of the teacher, the main value was in the improved communication about the teaching process which followed the initial procedure, manifested in a willingness to discuss probelms and to question approaches.

The second example involved a part-time day-release course for mining technicians. The course is of a fairly low-level, academically, and the average age of the students is about 17. Interest in the course was fairly low, although attendance, being compulsory, was good. The senior tutor responsible for the course sought the author's advice about this problem and it was decided to administer a questionnaire relating to that particular teacher's lectures and their usefulness to the students' work experience. The responses were, as anticipated, fairly mixed but the student group undertook the exercise with interest and seeming enthusiasm. Discussions with the author confirmed this; they were pleased to be consulted and claimed that the exercise was important in breaking barriers between themselves and the teacher. They were keen to see the procedure undertaken by other teachers. This in fact occurred later in the course. The procedure did much to facilitate communication between the teachers and the student group although the information provided by the instruments themselves was relatively of less significance.

The third case study relates to a three day course for practising social workers who were to supervise students during their field-work experience. The group were mature and familiar with the practical environment in which they operated. The course was intended to equip them better as teachers, and was deliberately activity-based with little formal input from lecturing staff. The two course teachers sought on-going evaluation to enable them to structure and replan each section of the course in the light of what had occurred to date. In addition, the purpose was to familiarise the students with some of the processes of evaluation, of which much of their supervision activities would consist.

This part of the emphasis was to suggest evaluation criteria of a systematic nature to them so that "off the cuff" judgements might be avoided.

The procedure, consequently, involved a number of stages so as to satisfy the various intentions. The first step asked students to list the qualities and aspects of performance which they would seek to evaluate in their supervisor's performance; this was undertaken prior to the first teaching session. The results of this exercise were summarised and discussed by the group, with the tutors suggesting their own priorities. At the close of the first and second days, the students were asked to complete a "Daily Evaluation Schedule", which sought information on the day's activities, on the content balance and the effectiveness of the programme. This information was summarised "overnight" and provided for the teachers planning the next day's session and for discussion between tutors and students to clarify points of concern. Finally a comprehensive end-of-course evaluation was undertaken which included reference back to the original priorities identified by the students. This was followed by an extensive discussion period between students, tutors and the author. This brought out the interesting point that the students were suffering from "evaluation fatigue", that the course had been over-evaluated for its short duration. This is a consideration which must be borne in mind when instituting feedback procedures on short courses. However, in the context of this exercise, the extent of evaluation was justified by its educational purpose. The procedure was of considerable value to the teachers in identifying useful strategies for incorporation in the next stage of the course and in future courses.

These three brief case studies are intended as examples of possible feedback techniques on part-time and short courses. Lack of space has prevented inclusi of more empirical details and the result is a largely descriptive paper. The models outlined are unlikely to be directly appropriate to other educational contexts but are intended to be idea provoking. Even if no structured procedures are adopted, teachers can only benefit from awareness of how things are going on a course and this is equally true of the tutor on a part-time or short course as of his colleague teaching in "main-stream" tertiary education, in which formalized procedures are more commonplace.

OPINION

Reference Lists for Students

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Abstract: The paper considers an area by and large neglected by research. Students depend to a large extent on bibliographical reference lists for the material which is used during independent study. Therefore, how such lists are drawn up and the different uses to which they may be put should receive considerably more attention than is normally the case. The paper identifies a number of different kinds of such lists and considers a number of strategies which teachers can adopt to enable students to use them in the most effective manner. These are based on intuition and experience gained from a limited study of examples; the need for more effective research is argued.

Most courses require some reference to printed and other source material as an integral part of the students' learning experience. Frequently, such references are to textbooks or set course books but may well include items of a more specialist nature as well as nonbook media. To assist students in coping with the information explosion which has occurred in most subject areas, teachers provide source lists which are intended to enable students to use their study time with the optimum efficiency. Such booklists or other source lists will vary considerably according to the type of course in question, the use to which the material will be put and the teaching strategies operative on the course. Some examples of the type of reference lists which may be provided for students and others are listed below:

(a) formal reading lists for syllabuses, course submissions (e.g. CNAA), etc. Such lists assist intending students and external bodies in determining the emphasis of the course. They are unlikely to be revised frequently and may be used by libraries and bookshops to assist with ordering;

(b) formal reference lists given to students at the start of a course. These lists may be similar to (a) above but more frequent revision is possible. Primarily, they are intended to assist students with book purchasing etc. and to provide a résumé of the topics to be covered. Indeed, such lists may be combined with a 'potted' course syllabus;

(c) detailed reference lists for specific units or topics on the course. These will frequently aim to indicate to students the breadth of available material and students will not be expected to refer to all items;

(d) copies of published bibliographies from books and other sources. These serve a similar function to (c) above but may suffer from a lack of discrimination in content;

(e) reference lists for specific essays, projects, etc., both individual and group;

(f) supplementary items or amendments made in lectures or seminars.

These examples do not exhaust the possibilities and they are by no means mutually exclusive. The purpose for which a reference list is intended will determine the content and style of its presentation and no hard and fast rules can, realistically, be made. The intention of this paper is to indicate some guidelines which may be of assistance to those preparing reference lists. They are not listed in any order of priority and any can be followed or rejected as the teacher sees fit.

1. Reference lists can be divided into sections containing general and more specific items.
2. It is also helpful to students to subdivide lists by subject or theme to enable them to identify references in the area currently under consideration.
3. It is frequently helpful to give students some idea of the importance of the listed material to the course. Some system of indicating priority is useful, either by dividing the list into sections headed 'essential', 'useful' and 'other material' or by, for example, starring items:

* * *	essential to purchase;
* *	essential to refer to, desirable to purchase but not essential;
*	useful for reference;
[no star]	useful supplementary material.

Any system adopted should be explained, in detail, to students. This system accepts the fact that few students will follow up all the references which they are given and will go some way to ensuring that they do refer to those items which are most important.

4. Where purchase of the book or other material is recommended, some approximate indication of price is helpful to students. When this is very high, an alternative, cheaper item may be suggested.
5. It is also helpful to indicate where books may be purchased, giving alternatives if copies are in short supply.
6. Where purchase is not essential, but frequent or occasional reference is, it can greatly assist students to indicate where the item may be found, e.g. college or public libraries. Class numbers, where available, can also be helpful as can some indication of the number of copies available.
7. If the item is difficult to obtain – for example, out of print or an American publication – and can only be obtained through libraries, it can be of considerable assistance to students to place copies (even your own personal copy, if necessary) on short-term counter loan in the library.
8. Inter-library loans can be suggested for unavailable material but this is not advisable if a large number of students will be seeking the same book.
9. If students do experience difficulty in obtaining material, the answer may be to make multiple photocopies of the most important chapters or sections available on short-term loan. If copyright laws are likely to be infringed, permission to do this should be obtained.
10. In the last resort, the unavailability of a particular item may necessitate the recommendation of an alternative and more available book.
11. It is advisable to provide reasonable detail about the publisher, date, etc., especially where more than one edition may be available. Likewise, journal references should contain all necessary detail and it is helpful to check these out personally, especially when references are obtained from published bibliographies. Errors in volume number, year, etc. are fairly common and can cause considerable frustration to students.
12. There is no intrinsic value to a very long reference list. It may well sidetrack students and keep them away from the most important items or alternatively may frighten some off. It might well be more profitable to refer enthusiastic students to good published bibliographies or to encourage them to use the various indexing and abstract systems which are available. In particular, where independent research for essays etc. is demanded, the published abstracts are of considerable value as timesavers and to enable students to widen the scope of their inquiry. In some cases, use of computerized systems, such as DIALOG, may be justified.
13. Some limited abstracting or annotation can frequently be justified in the booklists prepared by teachers. This is time-consuming but none the less valuable. Such annotation need be no more than the identification of the most important sections or chapters in the book but can give a more general indication as to the value of the publication. For example, a book might take a very dated view of a particular issue but be of value as a historical document in its own right. It can be useful to point this out. Some annotations can be humorous but care should be taken to avoid trivialization.
14. It is frequently desirable to supplement or update reference lists by mentioning additional items in class. Some indication should be given as to the importance of the material. It is advisable to write details on the blackboard or to allow sufficient time for students to copy from the book itself. Otherwise, confusion is likely to occur through misspelling of names and other misunderstandings.
15. Finally, it is important to ensure that students realize that it is unlikely that the lists they are given present the sum total of available material. They should be seen as a starting point for study and not the parameter beyond which students cannot stray.

This paper considers the very important topic of bibliographical reference lists which are compiled for students. The arguments are based on intuition and the study of an unrepresentative sample of examples of such lists. This is because the area appears to be one neglected by research with the consequence that teachers are operating in the dark when seeking to compile bibliographies for their students. Standard works from the field of information science will not necessarily be appropriate to the teaching context; this paper is no more than an attempt to temporarily bridge the gap which research could fill more effectively. Mann's definitive work on student usage of books does not probe the ways in which references can be transmitted to students in the manner most beneficial to their learning. This is an area which requires extensive and urgent investigation.

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Validating Student Feedback Schedules to Improve Teaching in Higher Education

TOM BAUM and MICHAEL BASSEY

The improvement of teaching in colleges and universities is one of the central concerns in contemporary higher education. While there is evidence of interest in this area from the early post-war years,[1] the main impetus in Britain can be paralleled with the general expansion in higher education of the post-Robbins[2] and Hale[3] era. There is evidence that similar developments in the United States preceded those in Britain and elsewhere by a number of years. Increasing interest in teaching improvement is clearly shown by the proliferation of journals in this area, the range and frequency of conferences throughout the world, and the rapid increase in academic staff and specialized units with the central function to promote the improvement of teaching.

However, the current economic climate has cast a cloud over the optimistic explosion in specialized teaching improvement personnel. Indeed, there is evidence of the closure of units and redeployment of staff,[4] which suggests that a radical reappraisal of the possible agents for teaching improvement will soon be necessary. Having experienced the benefits of full-time support and advice in teaching development, academic staff in Northern Ireland and elsewhere may find themselves dependent on their own resources and initiative in this area. Of course, this will have no effect on the suggested 80 percent or 90 percent of academic staff who take little interest in teaching improvement, the "apathetic majority" referred to by Mack,[5] but for the remainder it may prove a testing and disheartening time. They are likely to have to fall back on their own endeavors and initiatives so as to maintain attempts at improving their own teaching.

Knapper[6] has argued that, generally speaking, attempts at improving teaching necessitate some form of feedback on the pedagogic process to the individual teacher. This can take a variety of forms, including intuitive self-assessment, structured self-assessment, specialized researcher/staff development person assessment, peer assessment, head of department/senior colleague assessment, and student assessment. All teachers monitor their own work in some form, even if it is only in the form of "that did not go too badly today; perhaps I was not quite clear enough on the final point." Other forms of feedback are used in various ways and are formalized to differing extents.

The use of student feedback in teaching has increased considerably over the past few years in Britain, despite concern about its validity and the use to which information will be put. However, the latter concern has not been justified in this country because student feedback has not been used in promotion and tenure decisions, as has been the case elsewhere. Indeed, the general practice has been to develop student evaluatory mechanisms for what Knapper[7] has described as "supportive feedback" for the improvement of teaching. The use of instruments developed and validated on a large scale has been fairly extensive,[8] both within their "home" institutions and elsewhere. However, far more frequent is the development and use of feedback schedules by individual staff members who are seeking information about a particular teaching unit or course. They may use or adapt one of the instruments validated on a large scale but, more frequently, they operate by common sense and intuition, quickly listing a series of pertinent questions to suit their specific needs. These are then rapidly typed up, reproduced on a Xerox machine, and given to students without prior attempts to validate them in any extensive way. Indeed, to attempt meaningful research-type validation of such instruments would be beyond the resources or inclination of any teacher who is seeking rapid feedback on his or her work.

In view of the trends in support for teaching improvement in higher education, noted earlier in this article, teachers may increasingly have to initiate their own feedback programs and, consequently, will be faced with problems as to the validity and applicability of the instruments they design. Clearly, conventional research validation, involving extensive piloting and pretesting operations, is not appropriate to the teacher designing an instrument for limited use with a particular group or small number of groups of students. The work on student feedback instruments with which I have been involved has suggested four simple procedures, any of which may be adopted by the busy teacher to attempt some meaningful validation of a student feedback instrument. They should not be seen as replacements for normal and more thor-

ough validation procedures but as a pragmatic answer to the situation where, in most cases, no attempt at validation is made at all.

Four Suggested Validation Procedures

Undoubtedly, the most essential aspect relating to the validity of student feedback instruments is the meaning which respondents attach to the questions. If any variation is evident in the meaning which students attach to any of the questions, the responses to that particular question are valueless. Therefore, the four procedures all relate to this particular aspect of validity.

1. This approach is one frequently adopted during general instrument-validation procedures. The teacher selects a small number of students, perhaps including among them some of the more and less able representatives of the group. He or she then discusses each question in detail with them individually so as to ascertain their perceptions as to the meaning of the questions and to identify any other problems which may occur during the completion of the schedule. This procedure was used extensively by Clarke[9] during the validation of his student feedback schedule.

2. This procedure involves a validity test during the first run of the schedule with a class of students. While responding to each item on the questionnaire, students are requested to rewrite the original question in their own words on a separate sheet of paper. This re-definition process has been tried out successfully and enables any disparity in interpretation or ambiguity in the questions to be identified. Students can also be asked to note any other problems or uncertainties they have with the questions. This procedure is of limited use if the schedule is intended for a single run, but even then it can identify any questions where caution may be necessary in interpreting results.

3. This procedure involves the selection of a small group of students for testing purposes. The group is divided into pairs, and one of the two students is asked to complete the questionnaire at hand. However, he or she is required to try to verbalize his or her thoughts while responding to each question. Thus, he or she would read the question aloud and respond to any problems encountered with it. He or she may rephrase it, make disparaging comments about it and then verbalize reasons for answering in the manner he or she does. The second student is required to act as a scribe, jotting down the most important features of the colleague's "continuous stream of consciousness" so that the main problems can be identified.

4. This procedure is similar to No. 3. However, instead of employing a student as scribe, the responding student is required to record on tape his or her verbalized reactions to the questions. The use of a language laboratory may be helpful in this. The teacher need not attempt lengthy and detailed transcription of the tapes but can listen to each, jotting down the salient points raised by the students. This method is more time-consuming for the teacher than No. 3 above, but it ensures that important points are not omitted.

Conclusion

The four procedures described above do not provide a substitute for comprehensive validation of questionnaires *where this is possible*. They all suffer from evident weaknesses, but their main virtue is to provide the busy teacher, who wishes to devise his or her own student feedback schedule or to adapt another questionnaire, with simple and easily manageable validation so that *some of the most serious flaws* in the instrument can be eliminated. These are clearly not the only methods available; for example, discussions with colleagues can also prove useful in identifying some problems. The intention of this article is to suggest procedures in the hope that these or alternatives will become more widely used during the development of the many small-scale probes into student reactions to teaching and courses which are undertaken by teachers in higher education. □

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DO-IT-YOURSELF EVALUATION OF TEACHING

Abstract

The paper is critical of the generally prescriptive approach to the evaluation of teaching by students. Based on the author's research work in this field, examples are given as to how the lack of prescription enables teachers to employ evaluations in a far more varied, relevant and innovative manner.

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DO-IT-YOURSELF EVALUATION OF TEACHING

Here are the tools, let them do the work!

Student evaluation of teaching is one of the major topics for research, development and general debate within the context of staff/faculty development in higher education. Reference to but one annual conference for the years I979 and 1980, the 5th[1] and 6th[2] International Conferences on Improving University Teaching, indicates the extent of this concern on both sides of the Atlantic as well as elsewhere. Likewise, it is indicated by Flood-Page's[3] (1974) monograph which refers to the indentification of over 2000 references in the United States alone on this particular topic. The approaches which are described vary considerably according to the cultural, academic and particular institutional contexts from which they originate, but appear to be characterized by prescription in terms of

a) the objectives of the evaluation;

b) the criteria for success or otherwise of the evaluation;

c) the use to which the findings can be put;

d) the procedures to be followed in undertaking the evaluation.

In some cases, the guidelines offered are fairly specific; in others various options may be given with regard to implementation (how, who, when etc.), interpretation (by who, for what purpose) and subsequent action (teacher, teacher and colleagues, teacher and superior, administrator etc.). However, the general ethos of these evaluation techniques seems to be summed up by the subtitle above, "Here are the tools, let them do the work! " The consequence of this structured approach to student eveluation, is that models of application are characterized by similarity, allowing projects such as IDEA[4] to accumulate data bases of results from over 2million student respondents. It is perhaps inevitable that their experience of extensive research, development and testing, should persuade those working on student

evaluation projects to prescribe operational models; after all, not to do so may be seen as neglect, prevarication or incompetence. However, experience of working on a student evaluation of teaching project has led the author to question whether it is not this very prescription which has hindered the credible use of such instruments and has resulted in some of the scepticism which exists regarding their employment on both political and educational grounds?

Here are the plans, now make yourself the tools!

The student evaluation project with which the author was involved at Trent Polytechnic, Nottingham[5], was initiated with fairly prescriptive notions as to how and in what situations it should be employed. An initial inquiry into teaching and learning in the institution showed clearly that there existed considerable diversity in the perceptions of students and their teachers regarding the functioning of courses. Such "gaps" were evident on all courses but no general characteristics of these differences could be extrapolated; they varied significantly in kind and extent according to the particular courses. Furthermore, the comments of respondents clearly indicated that both students and teachers answered questions in the light of their immediate situation and, therefore, that responses had little or no summative validity.

A tenet of the project was that such divergent perceptions, constituting a communications "gap", were to the detriment of optimum teaching and learning effectiveness on a course. Most of the problems which a student evaluation exercise will bring to light are most effectively dealt with through a genuine dialogue between teacher and students. However, teaching situations in higher education do not always allow for such dialogue; classes may be too large to obtain any but the most forceably expressed opinions, the teacher may

only meet a group infrequently or operate from another department in a servicing capacity and, consequently, find it difficult to gain useful rapport with the student group. In these situations, a "pen and paper" instrument may act as a facilitator to discussion, it may be an "ice-breaker" to enable students and teacher to discuss issues of mutual concern. It may also give the student body a feeling of involvement and interest in the organization and teaching of their course which, in itself, may be no bad thing. This approach to the use of FEED-BACK on teaching, combined with optimum emplyment of FEED-IN information- details of course content, objectives, taeching methods, use of resources, assessment methods etc. given to students- may enable a genuinely effective two-way communication to be established in relation to teaching and learning.

This thinking resulted in the writing of an "ideas" booklet, Communication about Communication[6], subtitled "ways of improving learning by stimulating communication between teachers and students about the educational processes in which they are engaged". The booklet contains ideas for the provision of FEED-IN information but is predominantly concerned with the promotion of FEED-Back on teaching. Six brief questionnaires are included in the booklet, designated draft schedules. They are intended for use by a teacher himself or in collaboration with teaching colleagues, as is made clear in the introduction:

> A tenet of our approach is that the questions suggested are for teachers themselves to ask and not for administrators and others to use for purposes of evaluating courses or teachers. The questions are not designed for research investigations either. Their purpose is to improve communication between teachers and students.

The schedules cover various teaching/learning activities which are

common to higher education, comprising:

i) an overall "Course Effectiveness Questionnaire";

ii) a "Lecture Evaluation Schedule";

iii) a "Seminar Evaluation Schedule";

iv) an "Essay Writing Evaluation Schedule";

v) a "Practical Class Evaluation Schedule";

vi) an "Examination Evaluation Schedule".

Such division is not unique.[7] Furthermore, there are other aspects of teaching and learning which might warrent investigation on some courses; the overall approach can easily be adapted to comply with such requirements. Indeed, it is categorically stated that the schedules may be employed as they stand or may be adapted, extended or completely re-written to suit the particular requirements of the course in question. Where appropriate, teachers were able to reject completely the schedules as contained in the booklet and draft an alternative to suit their specific needs. By undertaking such revisison, a purpose had been achieved in itself, namely to create an awareness of the potential value of such instruments and to stimulate interest in their use. Clearly a problem can arise with regard to the validity of such instruments, particularily in respect of aspects such as ambiguity of wording. A number of simple techniques were developed to cater for such problems which can be undertaken by teachers themselves in relatively little time. These are described elsewhere[8].

Communication about Communication was sent to all academic staff in the institution. While some adaptation and variation was anticipated, a general model for use was suggested to teachers. This involved use of the "Course Effectiveness Questionnaire" as a general "pulse-taking" exercise, to determine whether or where particular problems, relating to the course, lay. Subsequently, more detailed

information about specific areas could be sought, either utilizing the other schedules or ones designed specifically. This model was implicit in the design of the booklet and the expectation was that many participating staff would follow it- a case of "Here are the tools, let them do the work".

However, in practice the model was but infrequently adopted in its entirity and it was soon evident that the booklet promoted interest among staff for a wide variety of reasons, which had not been anticipated when the aims of the exercise were identified. They are broadly consistent with the concept of facilitating communication but each have their own characteristics and motivations. Reasons for use of Communication about Communication included:

a) as a training device and awareness exercise for junior staff. A senior course tutor in a specialized, technical department expressed concern about a course in which student interest and staff commitment appeared to be low. Junior staff were strongly encouraged to employ techniques suggested in the book , both to encourage student interest and as a means of creating awareness about their own teaching. Teacher-feedback on this exercise was positive and led to further work with that department.

b) as a technique for getting to know a group of students. A teacher operating in a service capacity utilized an amalgam of the course effectiveness and lecture schedules early in a course to encourage discussion and interest from a group of students with whom communication appeared strained. Where this initiative differs from the anticipated model is that administration took place at a time when useful comments about the course could not really be expected; it was too early. The results of the question-

naire were of little interest to the teacher although he utilized them to initiate discussion with the group.

c) as a means of assisting course review prior to a Council for National Academic Awards visitation. The results of this exercise were kept internal to the course team and not presented to CNAA. It was used as part of a wider strategy to identify problems and issues relating to the existing course so that they could be considered in the preparation of the re-submission to CNAA.

d) as a means of identifying problems in a course for which responsibility had recently been taken. In this instance, a teacher took over responsibility for a laboratory class at the start of an academic year and had no opportunity to alter content or practice from the previous year. He undertook a detailed experiment-by-experiment evaluation of the course and its parallel lecture course on theory so as to enable him to develop a linked and coherant course compatible with his own ideas and philosophy.

e) to identify weak points in lecturing style. This fairly conventional use of a schedule was undertaken by a teacher whose native language is not English. He wished to identify particular aspects of his lecturing on which to concentrate particular attention. He also had the secondary purpose of improving rapport with the student group by being seen to acknowledge his difficulties

f) to assist in the introduction of evaluation and assessment concepts. This was the most unexpected use of Communication about Communication. It involved a three day course for practicing social workers who were to supervise

and assess students during their field-work practice. Regular evaluatory exercises, verbal as well as "pen and paper" were undertaken so as to introduce concepts and pitfalls relating to evaluation of performance and self-evaluation of teaching. This example has been described in more detail elsewhere[9].

g) to promote similar "self-review" among practicing teachers. The booklet was used during an in-service course for teachers as a means of introducing feedback techniques to them. They were encouraged to undertake such exercises within their own institutions, either through use of materials in the booklet, other available schedules or instruments developed for their own situation. The exercise also provided course tutors with an evaluation of their own activities.

Conclusions

It is evident that the actual uses which were made of Communication about Communication included some examples which show considerable divergance from the intentions and expectations which were originally identified. This may well be the case with many student evaluation projects but the literature concentrates on the majority and conforming cases and not on the exceptions. The project reported here was relatively loosely formulated and therefore divergent initiatives were of considerable interest, easy to accomodate and fully encouraged. This experience suggests that teachers directly concerned with courses to be evaluated could have greater involvement in the aims, strategies and consequences of such evaluations; it may well be that their requirements conflict with the expectations of the researchers. In such cases, it is arguable that teacher

wishes should prevail. On the debit side, generalizations and norms relating to particular instruments cannot be drawn with much certainty if consistency in context and administration is not maintained. It is the authors belief that such generalization is of little value in any case, to the teacher and is of fairly dubious validity. The benefits of greater flexibility and increased teacher involvement through "made-to-measure" evaluation exercises would seem to out-weigh the disadvantages. Clearly, further investigation and trial with this flexible approach to evaluation is required in other institutional contexts before its value can be confirmed.

Notes

1. Proceedings of the 5th International Conference on Improving University Teaching, City University, London, 1979.
2. Proceedings of the 6th International Conference on Improving University Teaching, Ecole Polytechnic Federale, Lausanne, 1980.
3. C. Flood Page, Student Evaluation of Teaching, the American Experience. SRHE, London, 1974.
4. IDEA- the Instructional Development and Effectiveness Assessment system. Center for Faculty Evaluation and Development, Kansas State University, 1975.
5. The Teaching Analysis Project.
6. M.Bassey, T.Baum, Communication about Communication, Centre for Educational Research, Trent Polytechnic, 1978.
7. For example, the system developed by D. McConnell at the Institute for Educational Technology, University of Surrey.
8. M.Bassey, T.Baum, Validating Student Feedback Schedules to Improve Teaching in Higher Education, Educational Technology, 1980 (forthcoming).
9. T.Baum, Feedback on Teaching - some case studies from part-time and short courses, The Bulletin of Educational Research, number 18 winter 1979/80.

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