# Academic Staff Development in Universities with Specific Reference to Small Group Teaching

by

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submitted for the qualification of
PHD

to the
University of Nottingham
Faculty of Education

March, 1989

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# ACKNOWLEDGEMENTS

"Keep on eating the elephant!"

This metaphor has become an everyday catchphrase in our Unit at Sheffield for the tackling of seemingly gargantuan tasks. It derives from my experience at a time management seminar and the advice given by the tutor on the accomplishment of those large jobs, which invite procrastination. The completion of this thesis has felt at times like one such elephantine task, and many have helped and supported in its consumption.

Colleagues too numerous to mention by name at both the Universities of Nottingham and Sheffield have maintained a generous supply of encouragement throughout all its stages. Frequent telephone calls enquiring as to the stage of digestion of the great beast have often prompted further chewing. Especially important have been those designated *The A Team*, my Staff Development colleagues at Sheffield, who have supported in practical ways, most particularly over past months, in diverting potential interruptions to my work in appropriate directions, often dealing with the queries themselves. For this I have been thankful. *Andrea Carlin*, my secretary, deserves particular mention in this respect and also for her typing of the early drafts of some chapters. Additionally *Amanda Bacon*, who processed the thesis, deserves great praise not only for her typing and micro-processing skills, but also for her unrivalled ability to decipher the original scripts!

I am indebted to all those students and lecturers in Nottingham, who welcomed me into their classes and showed that openness to the examination of teaching and learning, which has hitherto been so often sadly lacking in higher education. My work would not have been possible without their co-operation and collaboration. Equally, I owe thanks to many of the academic staff colleagues in Sheffield for the information given in the surveys we conducted; and especially to those few, whose conversations I have found particularly stimulating and helpful to my own thoughts on staff development and staff appraisal. I should like to mention in this context my thanks to *John Frisby* and *Bob Boucher* for their thoughtful and inspiring comments.

Research supervisors can attract a variety of comments. I was fortunate to have not only an international authority on academic staff development as adviser, but also a tirelessly supportive, sensitive and helpful friend, who tolerated a fellow Northerner's combination of direct, even abrasive counter-arguments and inappropriate literary leanings with kindly indulgence. It would be hard to find a more approachable and encouraging supervisor than *George Brown*.

There were times, however, when a "kick in the pants" was the more appropriate advisory tactic. Gauging this required the astuteness, shrewdness and wit of an additional unacknowledged, but nonetheless constant adviser to and supporter of my work. Although

sometimes administered in unconventional, even unwelcome ways, these salutary prods to action from my very dear friend and colleague, *John Partington*, contributed incalculably to completion. I remain grateful always for his mixture of contagious enthusiasm and acerbic turn of phrase.

Finally, I have had a patient and understanding supporter in my son, *Nathaniel*. There have been times, particularly over the last year, when his tolerance of an all-consuming task, which he could not be expected even to comprehend, has demonstrated an unanticipated level of maturity.

He will be even more joyous than I that "the elephant has been eaten." The relish that was its accompaniment was in no small measure blended by his unspoken, but unquestioning support and that of those others mentioned above.

# ABSTRACT

The research project and its subsequent writing up in this thesis has had three primary aims, which have been to carry out and present:

1. a detailed, qualitative consideration and evaluation of the aims and expectations of participants - both lecturers and students - in small group teaching in a university;
2. a scientifically-based analysis of the practice of small group teaching across six faculties within that university, focusing on amounts of lecturer talk and student talk, the nature of that talk and the interaction patterns between the participants;
3. an exploration, using information from two recently completed surveys, of the existing level of motivation within one other university amongst its staff to act on such results as this project yields.

The first three chapters serve as an introduction to the main issues within the thesis, to the design of the research programme itself and to the literature, which has informed the total project. An extended bibliography is also included, to inform further detailed study.
Chapters Four and Five focus on the consideration of aims of participants, the subsequent two chapters on the analysis of the practice of small group teaching as exemplified in the video-recorded data collected. Chapter Eight presents an exploration of the current climate and context, into which the above research findings and recommendations are to be introduced.
It is concluded from these various analyses of data that there is much scope for improvement not only of performance in university small group teaching, but also in perceptions of performance. Additionally it is feared that the current level of motivation to act upon such conclusions is low. It is recommended that further research is needed into models of staff development in institutions, in order that university provision might be so organised as to increase its effectiveness.

# CHAPTER ONE

# INTRODUCTION

Preamble

> "Once upon a time (to start as all good fairy tales do) just *to be* a university lecturer or professor was itself evidence of quality. As with the aristocracy in a pre-democratic age, any incompetence or indolence in a member of university staff tended to be regarded tolerantly, as a form of eccentricity. In days when a degree secured admission to membership of an exclusive social group, concern about standards was not seen as appropriate among those who had secured membership."
> (Nisbet, 1986).

This quotation depicts with mild whimsicality anachronistic facets of the former British university system - now a "civilisation, gone with the wind" of economic constraint, increased accountability and consequent contraction. Many members of this mini-civilisation might wish to perpetuate its previous isolation, elevation, untouchable exclusivity and enviable freedom of behaviour; such a wish is, however, both hopeless and pointless. The essential pragmatism of the 1980's, brought about by a straitened national economy, has called into question the universities' right to such exclusivity, which might permit and even encourage, eccentricity, indolence and lack of concern about standards. The previously unassailable privilege and assumed right of universities to be the only Government-supported area of education accorded such a degree of autonomy have been irretrievably undermined: the university system is now very firmly just one other part of an increasingly centralised education system in Britain, able to be questioned like the rest and expected to be accountable in the same way. Credible counter-arguments have been harnessed against this current trend.

> "There is a very obvious threat to British universities. This comes from ignorant pressures applied by a doctrinaire and anti-intellectual government which has a naive belief in the virtues of traditional engineering, privatisation and the economics of a grocer's shop."
> (Elton, 1987)

Such powerful and understandable arguments, however, are likely to go unheeded and indeed, to be counterproductive to the development of the system. The issues of accountability, measured competence and standards of performance within the universities have to be addressed for the good of their public image and in pursuit of improved efficiency and effectiveness.

Aims of the Project

This study has as its central focus the identification and analysis of effective and ineffective performance in one perhaps small, but, to be argued, highly significant area of a university teacher's work. The aims of this project, which analyses the practice of small group teaching across a variety of subject areas and examines the university context within which this teaching takes place, are primarily threefold:-

1) to increase awareness of the processes in small group work - its practitioners' aims, interpretations, methods, successes and weaknesses in using this approach as a vehicle for learning development;

2) to explore what level of motivation exists amongst university staff in the current climate

   (a) to identify effectiveness and ineffectiveness in teaching

and (b) to participate in activities which might enable improved performance in teaching, with particular reference to small group work;

3) in the light of one and two above, to reach conclusions about the ways in which university lecturing staff might most productively and positively be encouraged to improve students' opportunities for learning in small groups.

The emphasis in the above aims on enabling learning rather than on teaching is intentional, and underlines the fact that a secondary aim of this study is to provoke thought about the interpretation of the role of an academic in relationship to the students, and the body of knowledge and skills, with which they are both involved. Much has been written about theories of student learning, which is referred to both in the bibliography and subsequent chapters of this thesis, notably the 'Review of the Literature' section. It is, however, worthy of note at this stage that much of the design of curricula and courses of study as well as of the educational methodology across the wide variety of disciplines in universities is characterised by a preoccupation with *teaching*. Frequently when university staff are asked to identify the goals of their institution, they allude to teaching and research or vice versa. An alternative way of expressing those goals would be to say that all university staff are concerned with creating an environment which is conducive to learning at a variety of levels - undergraduate and postgraduate, and at its ultimate level advanced learning becomes that research carried out by the senior members of the academic community - the staff themselves. The relationship between staff, students and knowledge/skills implied in the latter definition of mission is fundamentally different from the underlying implications of the former. The latter reference to the creation of an environment conducive to learning at all levels suggests a sharing experience between all members of that environment and an enabling of learning for the less experienced by the more experienced within a given subject area. The notions of hierarchy and authority are diminished in such a statement of goal

and purpose. The former reference to the goals of teaching and research implies a separation of two distinctly different activities rather than the continuum of one essential activity, ie learning, and alludes merely indirectly to students only in a very passive role - those being taught. The reference is primarily to the functions of the staff and suggests a didactic and authoritarian approach to the relationship existing between students, staff and knowledge.

> "Higher education institutions should spend more time promoting learning skills rather than just subject-oriented *teaching*, because industry requires a flexible, trainable workforce, not people with dated skills."
> (Times Higher Educational Supplement, (THES) 21-11-86).

Although the above quotation emphasises requirements of industry, it does neatly focus attention on the essential differences between the development of learning skills and the process of teaching. It might be argued that academic staff in their role as "teachers" need to analyse the difference between the aims and the outcomes of the two activities in much greater depth.

No study of small group work in universities could fail to make detailed reference to the above relationship and to the dilemma and ambiguity between the processes of teaching and of learning. This theme will permeate the documentation of the project - most particularly in the chapters on aims of small group work and interaction patterns in instructional small groups. However, as well as exploring issues of how students learn effectively, whether by being "taught" or by being encouraged to take greater responsibility for their own learning development, for example in small groups, this thesis addresses also aspects of the environment within which staff and students work currently, which might or might not increase the motivation of academics to focus on learning and teaching and on improvement of their performance in this area. There exist currently both motivators and de-motivators in this connection.

Factors which Inhibit Motivation to Improve Performance

1) Financial Constraints

Most universities are operating in a situation of reduced resources and consequent contraction. Ways and means are being sought within those institutions to generate extra income, which might prevent staff losses on a large scale. However, since 1981 there have been considerable academic staff losses within university departments. From this situation a deleterious tendency might emerge to cope with less preferential staff-student ratios by increasing the amount of didactic teaching with large groups of students; or at the opposite end of the spectrum by developing extensive opportunities for self-learning with individualised instruction mechanisms. Although both the above-mentioned approaches to instruction have their appropriate places in the curriculum of a variety of university

instruction have their appropriate places in the curriculum of a variety of university departments, the importance of creating opportunities for students to meet with tutors and/or with each other in small groups to exchange ideas and to participate in discussions should not be underestimated for the development of knowledge and of essential professional and social skills. Such opportunities for learning might be decreased in times of contraction.

Additionally financial constraint and consequent loss of staffing results in increased time constraints. With fewer people to share the learning and teaching functions, the work with students in departments, there may be less willingness to explore and analyse teaching performance and to experiment with alternative approaches, which might bring about improvement.

2) The Predominance of Research

> "Universities can be distinguished from other institutions of higher education by their commitment to fundamental research. They carry out most of the country's fundamental research and are increasingly involved in its application."
> (Committee of Vice-Chancellors and Principals (CVCP) "The Future of the Universities", 1986).

Research has always rightly and appropriately had a high profile and status within university departments, but never more so than in contemporary times. Since the University Grants Committee's (UGC) survey and analysis of the research activities of all university departments in 1985 (UGC, 1985) and subsequent partial allocation of resources on the basis of the results of that analysis, academics within universities have become more preoccupied with their own research records. In addition to monies being allocated from central funding according to research activity, there has also been an increased emphasis on the importance of bidding with research proposals for income from other sources, eg industry, commerce, etc. The contemporary focus within most universities on income generation from sources other then Government via UGC has resulted in university staff seeking such additional income primarily via their research. The gradual introduction of administrative centres such as "Commercial and Industrial Development Offices" and "Industrial Liaison Offices" into universities indicates the desire to increase their links with industry and commerce, as encouraged by Government.

"Aims and Purposes

Higher Education should: ...

3) have closer links with industry and commerce and promote enterprise."

(Her Majesty's Stationery Office (HMSO) Cmnd 114. April, 1987).

Such encouraged "closer links" have been manifest predominantly in the area of research. With those explicit imperatives from such central bodies to increase research and industrial links and with no comparable incentives to encourage improvements in the area of teaching and learning, it is hardly surprising that academic staff do not readily engage in the analysis and improvement of that latter area of their work. Elton (1987) has pointed out clearly and ominously the potential effects of selective funding by UGC using performance indicators and peer judgment *only* in the area of research and *not* of teaching.

> "Universities have not been slow to realize that under the rules laid down by the UGC, no effort in teaching, however great, can increase the resources allocated to any one of them. Only efforts in research can do this. Inevitably in circumstances in which universities are fighting for survival, internal pressures will shift effort and resources from teaching to research.
>
> (Elton, 1987)

3) Criteria for Promotion and their Application

Universities have defined criteria for the purposes of promoting staff and in most cases these include amongst others outstanding performance in the areas of research and publications, of teaching and of administrative duties. Some have other defined criteria to take account of professional activities in vocational areas, eg "standing in the profession." Although the opportunities for promotion to senior academic posts in universities are much reduced, the criteria for the exercise still have impact on the work performance of staff. Just as universities have explicit guidelines for staff on the procedures and criteria for promotion, so do all universities have the same less explicit, although not hidden, agenda for the application and the weighting of those criteria. Despite the fact that allusion is made in all cases of documented criteria to teaching and to administration, it is only on the rarest of occasions that they are paid anything more than "lip-service" consideration. So long as this situation persists in universities, especially within current pressing time constraints, there will be little or no encouragement for aspiring academics to pay more than the same "lip-service" to their teaching duties. This is not to argue that excellence in research, which is a primary function of academic staff, should not be rewarded, but rather that excellence in teaching, which is also a primary function, should *not* be neglected and

therefore discouraged. As long ago as 1968 The National Board for Prices and Incomes suggested an increased weighing for teaching in the promotion system.

> "If we are right in thinking that the universities should use more of their resources for teaching, it follows that teaching should be properly rewarded in the pay and promotion system."
>
> (HMSO, 1968)

4) Lack of Peer and Student Feedback

The much prized concept of academic freedom, which is so crucial to the furtherance of research, has however, not been of equal value to the pursuance of excellence in teaching. Indeed, it might be argued that academic freedom carried across into the lecture theatre and the seminar room and interpreted as the lecturer's unquestionable right to function in splendid isolation and solitariness, has had a counterproductive effect on the advancement of learning and teaching in higher education. The view that observation of classes by colleagues constitutes invasion of privacy has prevented the healthy, open observation and analysis of teaching and the sharing of ideas and experience based on such an exercise. More open classrooms and a greater level of peer evaluation of performance have led, in those instances in which they have been practised, to an increased understanding of the processes of learning and teaching and an increase in experimentation with different approaches and methods. This project itself is predicated on such openness, on the perceived value of peer exchange of ideas and on peer receptivity to outcomes of the critical analysis of teaching performance. There remains nonetheless much further to go in increasing the level of acceptability and in persuading academics of the value of such techniques of peer evaluation and criticism.

An equally underdeveloped area of potentially productive analysis and criticism of teaching is that of student evaluation. Compared with countries such as the U.S.A. and Australia, where student responses to teaching approaches are an institutionalised form of feedback to teaching staff on performance, universities in Britain remain on the whole reticent and even suspicious of such methods. Although, the degree of its usage on courses in the United States might, in fact, be questioned and indeed might arguably detract from its credibility and hence its value, such extent and application do not have to be replicated here. It is, however, incontestable that more could be done in higher education institutions in this country to elicit the comments of the consumers of our system. Moreover, such comments on the performance of staff would furnish us with another additional dimension of valuable critical feedback, which should be regarded as constructive and contributory to the development of the skills of academic staff. It could be argued that our failure to develop systematic and concerted methods of analysis of performance in the area of

teaching and learning is in part due to the fact that we have chosen largely to disregard the opportunities for improvement readily open to us via peer and student evaluation and criticism.

Factors which might increase Motivation to develop Teaching Skills

In the previous section various aspects of universities have been examined which have contributed to the lack of initiatives to improve approaches to teaching and learning. These factors continue presently, but might be outweighed by new external influences, which will inevitably affect to some extent attitudes and methods in this area of an academic's work.

1) Increased Focus on Staff Development and on Quality of Teaching

> "Quality and Efficiency
>
> Quality will be enhanced by:
>
> - improvements in the design and content of courses, and in validation procedures
>
> - better teaching through staff training, development and appraisal."
>
> (HMSO April, 1987).

This quotation from the most recent Department of Education and Science (DES) White Paper on Higher education echoes many recent statements made concerning quality and standards in a variety of publications, not only those emanating from Government bodies and committees, but also independent writings, eg Moodie, 1986. Such words as 'quality', 'efficiency', 'effectiveness', 'criteria', 'standards' are all in heavy current usage with reference to education in general and higher education in particular, a domain which has hitherto been immune to such analysis and quality control. Various aspects of the aims and functioning of universities have been subject to examination - notably the management and administration, in the Efficiency Studies Report by The Jarratt Committee and the research profile of academic departments in the UGC research survey of 1985. There is no doubt that this current emphasis on external survey and analysis and the establishment of criteria for measurement (witnessed also by the work being carried out currently within the CVCP on the identification and publication of performance indicators for universities) will extend to the area of learning and teaching, despite the complexity expressed on occasions with reference to the evaluation of teaching.

> "... I know of no university which has found a way systematically to identify good teaching, and certainly the UGC is in no position to do so."
> (Swinnerton-Dyer, Sir P. "Weighing Out the Pots of Gold",
> THES 15-11-85).

Sooner rather than later managers of higher education outside and inside universities and practising academics will recognise that many universities and polytechnics within Britain and in other countries have long since found ways of systematically evaluating teaching. References are made in the bibliography to a variety of writings by Elton (1984), Goldschmid (1978), Knapper (1980), Murray (1984) and Prosser (1980), all of which substantiate the feasibility of evaluating teaching systematically and indicate methods of doing it. Indeed universities in Britain have for many years been paying salaries to a group of people charged with the responsibility of measuring, on behalf of DES, the competence of teachers for the primary and secondary sectors of education, ie lecturers in education (PGCE). In fact the UGC could today be provided with a weighty dossier of instruments, which could be disseminated to universities as a basis for their development towards the identification of effective teaching skills and practice in higher education. These instruments and techniques might have to be adapted and refined to the specific requirements of lecturers and students at this level, but to pretend that they do not exist or that they are inapplicable is both absurd and counterproductive to progress towards the "excellence in teaching", to which Swinnerton-Dyer later refers in his article.

Just as exercises have been developed and carried out in the measurement of management and of research, so will it soon become imperative that we engage in the establishment of criteria for the identification of effective and ineffective teaching. This project is concerned in part with precisely that issue with reference to small group work. It may well be that the results and recommendations deriving from it have a greater chance of influencing performance because of the current climate here outlined.

2) Mature Students and Continuing Vocational Education

> "The importance of adult continuing education is now widely - albeit belatedly - accepted. Many individuals want or need education in middle life, sometimes because they had no earlier opportunity and sometimes to make good deficiencies in their previous education. Overlapping with them are the many who need updating, retraining or new skills - for example in business management - in order to remain competent members of Britain's increasingly technological workforce. The Government's intention is that both these broad categories should be well served, and it has promoted programmes on both counts."
>
> (HMSO Cmnd 114 April, 1987)

Much encouragement is being given to universities by Government, as indicated in the above quotation, as well as by CVCP and UGC (NAB/UGC Report, 1986) to make provision for the intake of a variety of mature learners. In the past a relatively small number of "adult" students have attended courses, but compared with the number of mature entrants to polytechnics and colleges of higher education, those studying in universities have amounted to very few indeed. In addition to those more traditional

mature entrants, ie those taking up conventional degree courses in later life and those completing extra-mural courses in Departments of Continuing Education, there is now a wider variety of adult student via specific initiatives such as DES/PICKUP (Professional Industrial and Commercial Updating) and schemes organised by the MSC (Manpower Services Commission). Although such initiatives have not, until recently, had much involvement with universities, there are now indications and indeed incentives to universities to increase their provision of places for these schemes.

> '11 per cent growth not enough.
> BAKER'S PICKUP TARGET
> "I want to see a fivefold increase in the next five years - by 1992."'
> (Baker, Spring, 1987).

There is every indication that the DES see at least some of this fivefold increase coming via the involvement of universities.

In their previous work with other education institutions, the PICKUP co-ordinating staff have targeted staff development as one of the key priority areas in the provision of appropriate courses for PICKUP students. It was felt by them that the curriculum and course design as well as the teaching methodologies in current use with the more conventional students in polytechnics and colleges of higher and further education were not always the most suitable and relevant ones to the needs of the mature learners from commerce and industry, wanting updating in specific skills and knowledge. Academic staff within these other sectors of higher education have been encouraged to develop their skills in order to provide more appropriate courses and teaching to their specific needs. The DES itself has funded work, eg by the FEU (Further Education Unit) in the area of staff development, and the result has been the production of a study guide and five training modules, looking at different aspects of the planning and provision of PICKUP courses for industry and commerce, targeted at those staff in higher education responsible for such provision. This author is presently involved in the first research project funded by DES/PICKUP, looking at staff development needs in universities in this context. There is, therefore, strong encouragement coming to universities from the DES via such schemes, to analyse teaching approaches in relationship to this potential new clientele.

The following extract from the project report "A Partnership in Learning", (commissioned by the DES and stemming from concern expressed by a variety of those involved, that much could be done to develop the range and amount of adult training carried out in partnership between employers and colleges, polytechnics and universities) indicates a perceived need in universities as well as in polytechnics and colleges to develop course designs and learning methods appropriate to mature client needs.

"Para.3.7.2. **Linking Methods to Needs.**

...There is general acceptance that lectures are unlikely to change attitudes ..., there is also strong conviction that discussion can lead to new opinions, especially if there is a skilled discussion leader present. Amongst the many individual views recorded, these seem to come nearest to supplying a justification for a particular learning process:

working on real life case material which is relevant to a person's own responsibilities allows that person to identify with the problems presented ... and with the successes presented ...

learning at one's own pace and in one's own way allows a person to see the learning as an enjoyable activity rather than an imposition

answering questions is more challenging than remembering answers

tutoring allows *individual* development

a mixture of crystal ball gazing, brainstorming and problem-solving makes learning exciting and creative."

(Institute of Personnel Management/DES PICKUP, 1986).

In referring to mature students and to Continuing Vocational Education it should not be overlooked that pressures to adapt and change teaching and learning approaches will not only come from the sponsoring agencies previously mentioned, but also from the students themselves, who bring to their studies and courses arguably different and more perspectives than conventional, eighteen-year-old, post "A" Level entrants. In an article concerning mature students and the Open University (1975), Elton identified three groups of mature students as follows:

"The first then is the examination-orientated group ... They are highly motivated, they need security in their study and basically one gets so often the question from them, either straight or disguised, conscious or sub-conscious, 'what will I be examined on?' This group is excellently served by what I might call the traditional Ed. Tech. approach: the specification of aims and objectives, the provision of materials designed to satisfy those aims, the provision of tests and self-tests to reassure the student that he is in fact satisfying them ... The second group is the 'love of education' group ... Their love of education conflicts with a directiveness of most degree courses ... The very great importance of discussion in the life of the 'love of education' students, whether it is discussion with a tutor, or, perhaps even more important, peer group learning ... The third group ... I call it the 'link-to-experience' group. Every adult student has very substantial experience of life and, so far in this country, whether in traditional universities or in the Open University, this is not integrated in any way individual to the student, into his degree studies."

This quotation, which I have taken the liberty of including in some length because of its significance to the argument, indicates the considerable and varied needs of mature entrants. Such needs, which adult learners have the maturity and confidence to assert to

their tutors, are going to make greater demands on the academic staff of universities to analyse critically traditional teaching methods and courses and develop new, more appropriate designs and techniques.

It might well be the case that the current pressure from a variety of sources, as outlined in this section, to increase the provision of places within universities for mature entrants, will act alongside other contemporary influences as a catalyst, which will provoke increased interest in staff development.

3) Staff Appraisal and Staff Development

> "Universities have always been more ready to investigate and assess others than themselves, and who can blame them for sharing in the frailty of human nature. However, the time may not be too far off when, if they do not maintain order in their own house, others may insist on doing it for them. If this happened the inroads that would be made into the freedom which universities rightly cherish could be incalculable. Will they be able to change in time to prevent this from happening?"
>
> (Elton, 1987)

In the above quotation, Elton refers to the present political imperative to universities to develop procedures for staff appraisal of work performance. In his book he encourages them to design their own schemes, suitable to their needs, and stresses the importance of interpreting appraisal as an opportunity for the improvement of performance primarily.

Since the issue of staff appraisal is to be dealt with in greater detail in a subsequent chapter, it is only intended here to introduce it and its potential contribution to increasing motivation amongst staff to encourage and to become involved in training and development activities. Of all the contemporary influences discussed in this section concerning factors which might increase motivation to develop teaching skills, the introduction of appraisal into universities might well prove to be the most powerful. As Nisbet (1986), quoting from The 1985 Green Paper, so succinctly puts it:

> "'Effective staff development will not happen without a formal institutional framework for evaluating performance and for responding to development and training needs'
>
> The point could have been made the other way round: a formal framework for evaluating performance should not happen without effective staff development."

Although there may be arguments as to the exact nature of the relationship between these two essential functions of human resources development, there can be no doubt that they are indissolubly interrelated. The inevitable linking of staff development and training to such an innovation, despite its political nature, might well provide the impetus that has so sadly been lacking amongst academics hitherto.

Summary

The purpose of this chapter has been to state the aims of the research project and to introduce some of the issues surrounding those aims. An attempt has been made to indicate the significance of analysing the difference between *teaching* and *enabling learning* and to outline several current pressures which might either inhibit or encourage the motivation of academic staff in universities to participate in programmes, which are intended to develop skills in the area of teaching and learning.

In subsequent chapters these ideas will be developed more fully. The aims of small group work as perceived by both students and lecturers will be examined, then an analysis of aspects of their behaviours within instructional groups will examine how far current teaching practice fulfills the aims and expectations stated by these participants. Thereafter the motivation to act on the results of such an analysis is assessed by a comprehensive exploration of the attitudes of senior staff in one university to

1) the draft Code of Practice on Academic Staff Training written by Brown (1986) and published by CVCP and
2) articles on and models of staff appraisal circulated to them.

In the concluding chapter, in the light of these detailed analyses recommendations are made about ways in which academics might be most effectively encouraged in the present climate to improve students' opportunities for learning in small groups.

Let us hope that we have now reached a time when such healthy openness to observation, criticism and analysis, upon which this researcher has been able to rely, will soon permeate the whole of the higher education academic community; and that the fairy-tale days alluded to in the opening quotation of this chapter are irretrievably shrouded in the mists of the past.

# CHAPTER TWO

# REVIEW OF THE LITERATURE

Introduction

Given that this thesis is concerned primarily with the research and development of small group teaching within the context of staff development, this chapter concentrates on three main areas, which have had a particularly significant impact on the development of the researcher's perceptions and approaches.

There have been comparatively few studies of small group teaching in higher education. Of these some have concentrated on comparisons of approaches to university teaching in general (Bligh, 1972), while others have focused on different methodologies of organising small group instruction, sometimes suggesting one particular, basic methodology, eg the discursive, participatory group (Rudduck, 1978). No study hitherto has explored a large and varied collection of samples of seminars, tutorials, etc. and examined in depth using scientific methods the processes of teaching within them.

This thesis addresses itself principally to two aspects of small group teaching:

the perceptions, which those participating (both staff and students) have of this teaching process - its intentions, its practice, its benefits and its problems;

an analysis of the actuality of the process as experienced across a series of groups drawn from several different faculties.

It is intended therefore to contextualise the research by investigating studies in the following areas:

1. the nature of small group teaching: ways in which it has been interpreted by researchers and writers;
2. approaches hitherto to studying and researching small group teaching, including an analysis of both quantitative and of qualitative research methods;
3. the backcloth to current staff development, described by an overview of attitudes to its implementation since The Robbins Report (1963) to the present day.

The structure and content of this chapter, therefore, when combined with the references within the text and the bibliography, provide a background to and rationale for the subsequent experimental investigations, analyses and recommendations.

1) The Nature of Small Group Teaching

Various descriptions and interpretations of the nature and function of small group teaching are given in subsequent chapters by lecturers and students involved in the project. Also conclusions are drawn in the final chapter and recommendations made in the light of the research findings about ways of improving this process of teaching. It seems sensible, therefore, to begin this part of the review concerned with small group work by examining how it is identified in the literature.

In universities we do have difficulties with our differing perceptions of this teaching medium. An anecdote serves to illustrate this. In the preliminary stages of data collection, a range of departments were visited with a view to encouraging lecturers within them to participate in the project. A small Arts Faculty department was visited and the professor was asked if some of the small group classes might be sampled. His reply contained the question

> "Yes, indeed. What do you mean by small group? Three or four members?"

Shortly afterwards the Head of a large Engineering department was interviewed and his response to the request for sampling small groups was:

> "We might be interested. What did you have in mind? Groups of sixty or seventy?"

These two responses begged the following question in the researcher's mind. How far do lecturers across different academic disciplines perceive the term small group teaching as a quantitative label, which says little about methodology of teaching, rather only about the numbers involved? Or is the predominent perception that it signifies a qualitatively different form of teaching? What is there in the literature which might encourage lecturers to see their small group work as a qualitatively different interactional process?

An overview of studies of small group work suggests that there have been broadly three main ways in which it has been identified and examined.

(a) It has been seen and treated by some writers as one teaching approach within a repertoire of approaches including, for example, lecturing, laboratory teaching, individualised learning. Such literature tends to regard small group work emphatically as an instructional medium and as such offers to readers 'tips' in improvement. (See Brown and Atkins, 1988.)

(b) The second way in which the small group in higher education is treated is by comparative description and/or analysis of ways in which it is practised by different lecturers. Such literature often takes the form of an anthology of

articles and case studies of various ways of approaching small group teaching eg seminars, problem-solving, syndicates, tutor-led, tutorless, etc. (See Bligh, 1986.)

(c) The third approach to studying small group work differs from the two above in that it addresses this form of teaching as a qualitatively different, special and complex process, which requires of lecturers an understanding of social skills as well as content knowledge of the academic subject. Writers in this category analyse small group work not within the general framework of higher education teaching techniques, rather alongside the practice of this medium in other professional areas eg psycho-therapy, counselling, medicine, etc. (See Heron, 1986.)

It is the intention now to review examples of literature from within the above designated categories. The examples referred to in sections (a) and (b) will be fewer than those given in (c), since it is those alluded to in (c) which have most influenced this particular study.

1 a) Examples of Works on University Teaching in general which include Reference to Small Group Teaching

The literature on teaching in higher education has covered a variety of areas. Some of the more general writings include discussion of small group teaching. In "What's the Use of Lectures" (1972), Bligh analyses achievable objectives of lectures, factors which affect acquisition of information, and lecturing techniques, which accommodate these factors most effectively. He also explores alternative teaching methods, where lecturing is inadequate. Bligh presents a sensible and practical appraisal of the appropriate use of lectures and gives guidance on lecturing skills. He concludes that lecturing is useful for conveying information and providing the framework for a topic, but that this expository method is unsuitable for stimulating thought and changing attitudes. **Small group teaching**, he proposes, is preferable for those purposes.

Studies such as "Teaching and Learning in Higher Education" (Beard and Hartley, 1964) and "Improving Teaching in Higher Education" (Jackson and Jaques, 1976) contain a more general overview of teaching methodologies. Both publications examine the spectrum from large group teaching through to independent learning. There is an emphasis in Beard's work on psychological theories of learning and on defining objectives in specific areas of study, whereas the compilation edited by Jackson and Jaques focuses on the preparatory organisation and practical design of a course. Both include valuable sections on assessment techniques, evaluation of teaching and learning as well as on small group study methods.

The most recent work within this category, which has just been published is "Effective Teaching in Higher Education" (Brown and Atkins, 1988). This compilation of analyses of various teaching approaches provides the higher education practitioner with an introductory guide not only to different methods,styles and skills of teaching but also to

pertinent research in each of the areas covered. Hence the reader is introduced to goals and techniques of lecturing, small group teaching, laboratory teaching, research supervision, student study skills and is also enabled by the research references in the work to follow up any of these areas in greater depth. The study itself is noteworthy for its eminent readability and for its coverage of the most up-to-date research and material in the field of university teaching methodology.

1 b) Compilations of Articles concerning Instructional Small Groups

It would be denying the reader sources of excellent material on different approaches to small group teaching if two most illuminating and informative compilations of writings in this field were not referred to. Bligh's (1986) publication "Teaching Thinking by Discussion", presents those interested in small group work with a comprehensive and stimulating compilation of work done in this area over the past thirty years. It ranges in content from the handling of tutor facilitated, participative groups with an accent on social processes, through case study preparation and practice, the encouragement of creating thinking in groups, to an introduction to ways of evaluating group discussions. It includes also examples of writings from a variety of different university systems in a range of countries and provides essential background reading for anyone who is either involved in research or teaching in small groups.

A second less comprehensive, but equally useful collection of writings on small groups in higher education derived from Imrie's (1980) study leave from the Victoria University of Wellington, which he spent at the Univeristy of Queensland, Australia. His work was subsequently published by the Tertiary Education Institute (TEDI) of that latter university under the title of "Small Group Development Reference File". It is indeed just that and provides the researcher with a good basis to begin his readings on small group work. It has a section on reflections of practitioners at Queensland University on their experience, followed by a longer series of reading designed to complement a programme of activities on small group development for lecturers. It includes extracts from writings and articles in total, comprising descriptions of experiences, of methodologies, and of techniques for a range of situations from, eg. the very first meeting of a group, through leaderless group work, to procedures for assessment and evaluation.

The references above are two of the most comprehensive compilations of work done on small group teaching within higher education, and constitute a useful starting point for anyone interested in pursuing the study of this method.

1 c) In-depth studies of the process and participant attitudes and behaviour in small group work

> "By being in a smaller group, one feels part of the class, rather than just another face in a sea of faces. I actually feel more a part of the University."

This quotation by one of the students involved in this research project, which is re-iterated and examined more closely in Chapter 5 emphasises the nature of the involvement of student participants in small group work. It is clear that, for this student, the cognitive dimension is only a part of that involvement. In this short quotation he uses the verb "feels" twice, and in the two references to a sense of belonging - to the class and to the university - he conveys his recognition of the fact that the social aspects of smaller classes are significant for him and for his total learning experience in the university.

This third section then deals - in greater detail than the previous (a) and (b) with works which explore the instructional small group as a series of social interactions and processes, in which the attitudes and behaviours of all the participants - both learners and facilitators - play an important part in the intended learning development. This section (c) gives a more detailed analysis of selected writings than the previous two, since although the more general works already alluded to informed the beginning phase of the work, it is the following studies which have most directly framed and influenced the directions of this research.

1 c i) Small group work in a general professional context

Much has been written about the small group medium in a general professional context and it is important to frame the study of small class teaching within those explorations of interpersonal communications and social skill. Van Hassalt et al (1979) analysed hitherto attempted definitions of social skills, and in so doing summarised conclusions reached from work done in the 1970s in the following three elements, critical to the concept:

> social behaviour comprises both verbal and non-verbal elements, which, they argue, are acquired and learned.
>
> effective interpersonal behaviour assumes the capacity for behaving without causing harm.
>
> situation - specificity is significant, ie few interpersonal behaviours have the same significance across different situations.

These three critical elements of socially skilled behaviour, as defined by Van Hassalt et al, although not specifically related to teaching within small groups, are nonetheless helpful to a lecturer's consideration of what it is that s/he is attempting to do in tutorials, seminars, etc. and how most effectively to go about it. They emphasise that our interpersonal

behaviour - both verbal and non-verbal - is likely to have an effect on the interactions which take place and thus on the outcomes of our intentions for learning development. Skilled practice in small group teaching according to the above definition implies a capacity on the part of all group members for behaving without causing harm; and so, presumably it is incumbent upon the lecturer, as group facilitator, to encourage and enable that capacity in others as well as in him/herself. The third element in the Van Hassalt definition suggests that it might be productive reflection, if lecturers were to explore the specifics of the small group teaching situation, to have an understanding of which aspects of it bear comparison with other types of small group facilitation and which demand situation - specific skills. In short, it is clear when we begin to research the literature of small group interactional processes that their complex nature is something which every practitioner needs to consider, in order to operate effectively.

Other attempts to define the concept of social skill in the 1970s and 1980s are also helpful to our understanding of the nature of small group work in higher education. Theoretical analyses of the nature of behaviour in groups and what conditions it (eg Argyle, 1972; Bellack and Hessen, 1979; Saunders et al (1980) have led to a variety of ways in which socially skilled behaviour in groups might be conceptualised and defined. Argyle (1972), for example, analyses socially-skilled responses and argues that they are hierarchically organised in such a way that large entities of social interaction eg interviews, are made up of a series of small units of verbal and non-verbal behaviour, such as posing and answering questions, eye-contact, etc. Moreover, he emphasises his belief that training can help the acquisition of these smaller behavioural units with a view to their subsequent integration and the development of effective social behaviour in large social encounters.

There have been a variety of further attempts to analyse and define the term 'social skill'. Some of these demonstrate a tendency to view it as an **ability** possessed to greater or lesser degree by individuals. Combs and Slaby (1977) define social skill as:

> "an ability to interact with others in a given social context in specific ways that are socially acceptable or valued and at the same time personally beneficial, mutually beneficial, or beneficial primarily to others" (p 162).

Phillips (1978) reviewed approaches to the analysis of social skill and concluded that an individual is socially skilled according to the degree to which ...

> " he or she can communicate with others, in a manner that fulfils one's rights, requirements, satisfactions or obligations to a reasonable degree without damaging the other person's similar rights, requirements, satisfactions or obligations, and hopefully shares these rights etc. with others in free and open exchange." (p13).

Other theorists offer a definition different from **ability**-focussed as above, but rather **behaviour** focussed. Libet and Lewinsohn (1973) describe a socially-skilled person as characterised by his/her pro-social **behaviours** which are positively reinforced by others as opposed to behaviours which are anti-social and negatively reinforced. Spence (1978) presents social skills as compontents of social **behaviour**, which are necessary to ensure that people achieve what they want from a particular social encounter. Rinn and Markle (1979) sum up their definition of social skills as "a repertoire of verbal and non-verbal **behaviours**". More recently work by Hargie et al (1981) on social skills in interpersonal communication led to their definition of the term as

> "a set of goal-directed, inter-related social **behaviours**, which can be learned and which are under the control of the individual."

This definition with its reference to control takes us back again to Argyle's assertion that the individual acquires interpersonal behaviour patterns, which can be learned and developed. This then in turn takes us forward to an examination of the literature which focuses not so much on theoretical analysis, but more on the identification and effects of different types of social behaviour and further to approaches to training in social skills.

Hargie, Saunders and Dickson (1981) identified and considered in detail nine areas of social skill: non-verbal communication, reinforcement, questioning, reflecting, set induction, closure, explaining, listening and self disclosure. These behaviours they examine in a variety of professional contexts including teaching, and attempt also to provide systematic descriptions of these selected specific skills, which, they intend, as a useful reference frame for a wide range of professionals eg doctors, nurses, teachers, lecturers, social workers etc. involved in social interactions in their work. It is their intention then that these practitioners use such descriptions and analyses to inform and improve their practice; which intention rests on the assumption that effective interpersonal skill can be learned and practised, and is thus a **behaviour** rather than an ability. Earlier work to which Hargie et al refer and which made a significant contribution to social learning theory was that of Bandura (1971), who asserted that all behaviour repertoires, apart from elementary reflexes are learned. Bandura writes of the early social learning stages of "modelling" and "imitating" the behaviour of significant others eg parents, teachers, peers etc. In this way, he contends, children ape others in their walking and talking patterns and subsequently in voice, accents and dress. Reinforcement plays a major role also in his development theory. Childhood behaviours will be variously encouraged, discouraged, ignored by parents, friends, teachers, and generally children tend to display those behaviours, which are encouraged.

Reinforcement then is a critical identified skill, which might be practised and used productively in small group work. Heron's work (1986) extends our experience further into the practical realm. He is concerned not only with identifying behaviour, but also with providing a means by which the identified productive behaviours might be developed. In his "Six Category Intervention Analysis" he provides us with a tool by which we might shape our practice. His work derives from the study Blake and Morton's (1972) short monograph, which introduces their "Diagnosis and Development Matrix" for the analysis of social interventions. Whereas their matrix focuses primarily on interventions in organizational life, Heron developed their ideas for use in the different context of analysing one-to-one, one-to-group and inter-group interventions. He suggests that his system of analysis can be used effectively for the improvement of practice in a variety of professional areas, including counselling, interviewing, therapy, tutoring etc. Heron asserts that in his experience -

> ".. a wide range of different practitioners in our society show a much greater deficit in the skilful use of facilitative interventions than they do in the skilful use of authoritative ones."

When the results of the analyses in this research are presented in later chapters, we find confirmation of Heron's assertion, at least certainly in the area of small group teaching in higher education.

His categories and analysis by means of them might indeed aid lecturers to identify the kinds of interventions they most commonly use and then compare those and behavioural outcomes they encourage with other types of interventions, which might more appropriately match their intentions. Heron's six categories: three authoritative: ie prescriptive, information and confronting; three facilitative ie cathartic, catalytic and supportive are value-neutral. He argues that no one category is either more or less significant than any other. Indeed each of the six can have value in an appropriate context. What he is concerned with is the identification of the specific value of each and

> "the cultivation of competence in all types of intervention ..... within the province of continuing education in its widest sense."

Having reviewed some of the most influential readings on the study of social skills in professional contexts, which have played a major role in the design and direction of this research, it is now the intention to consider in detail several works, which focus specifically on the process and behaviours within university small group teaching.

1 c ii) Situation - specific studies of small group teaching

Within the literature which exists on small groups in higher education similar categories can be identified as were for the examination of general social skills literature. There are those writings which provide theoretical insights into it, those which identify and describe particular aspects and thirdly those studies which have as their aim the improvement of the readers' practice by suggesting formulae and/or activities for their development.

Watt (1980) examines critically the evolution and practice of the "seminarium = a seed bed", and ends with an appraisal of some of the difficulties associated with its practice ie problems of authority, student participation, varied interaction patterns, etc.

Amongst other theoretical explorations Stenhouse's article (1972) presents a clear, incisive critique of his own and other colleagues' experience of participatory small group teaching. He outlines initially the type of teaching group, to which he is specifically referring.

> "It is concerned with participatory small group teaching in situations where the tutor talks, let us say, less than 25 per cent of the time, where he is concerned to throw a great deal of responsibility on the students and to develop their autonomy and where he accepts that the work of the group should take account of the needs of all its members. There is no suggestion that all small group work should be of this sort, merely that this is one useful kind of work."

He alludes to the difficulties of creating the "essentially co-operative and essentially participatory" model of teaching within the "competitive assumptions of our educational system". One of the most interesting and significant suggestions put forward is that group procedures have to be formalised and structured, in order that such aims of collaborative learning might be achieved.

> "Successful teaching in participatory small groups depends on the establishment of procedures appropriate to educational aims, and this can best be done if conventions and rules are made explicit by the tutor."

Because of their educational background hitherto, students expect the tutor to be an authority figure, whom they assume will "play the role of instructor in the sense that they expect him to take responsibility for their learning." According to Stenhouse the tutor has the task of weaning his students from these powerfully pronounced expectations by creating explicitly the kinds of group structures, procedures and atmosphere, which are conducive to co-operative learning. He adds that "this is an encouraging position for teachers since it suggests that competence in small group teaching is to a large extent capable of being learnt. It is not some personal or intuitive possession in the absence of which the teacher cannot be effective."

In order to explore in greater detail the form that such rules and procedures might take, Stenhouse presents a useful categorisation of educational tasks. He rejects the definition of such tasks in terms of cognitive, affective and psycho-motor aims as a "laboratory distinction rather than a teaching distinction", and prefers instead to divide tasks into - "knowledge, application, understanding and skills". He goes on to explain these four areas and discuss the appropriateness of each as a valid, educational task for small group learning.. He concludes at the end of this section:

> "Participatory small group teaching is thus effective as a critical exchange in which significant relationships are suggested and explored in order to promote an understanding of the structure and logic of knowledge or a group of the problems applying knowledge or skills in various situations."

Stenhouse ends his concise, sensible and illuminating short article by summarising in six clear points the position he is advancing:

> "1. Effective group work depends upon the establishment of rules and conventions - it is formal.
> 2. The teacher will be most effective if he defines his role and thereby makes his use of authority also rule-governed, and his areas of initiative clear. Small group work is not forwarded by the renunciation of authority, but by its definition. Effective leadership is relatively formal.
> 3. Both group rules and teaching roles need to be logically consonant with the demands of an explicit task.
> 4. Group rules and teaching roles need to take account of the psychology of groups.
> 5. A variety of reports of patterns of small group teaching exist and provide a range of choices which have some claim to meet the demands of 3 and 4 above.
> 6. Given that effective small group teaching is relatively formal and that reported patterns offer precedents, it is possible to increase one's effectiveness in working with groups by learning, ie effectiveness is not merely a function of personality supported by mystique."

Point 6 above is a significant aspect of Stenhouse's position with particular relevance to the possible learning activities for lectures,which derive from the findings of empirical research studies such as this one. He believed as do Argyle, Hargie, Heron and indeed as does this researcher that skills in small group teaching can be improved and developed, and that the personality of the lecturer, although it might be one factor in the effectiveness of such teaching, is only one of many aspects of the role.

Rudduck's work at the Centre for Applied Research in Education, University of East Anglia, between 1972 and 1978 and her subsequent publications provide us with identification of behaviours and descriptions of experiences of both students and lecturers. Her extensive observation of thirteen teaching groups at the University of East Anglia, both in the teaching room, and on video-tape, resulted in the publication of materials, tapes,

articles and a book, all of which give the researcher invaluable and penetrating insights into a variety of teaching approaches and skills. It is intended here to focus on two items from the above project, namely an article "Interaction in Small Group Work" (Rudduck, 1978) and "Learning through Small Group Discussion (Rudduck, 1978), Both publications grew out of the author's involvement in the above project of protracted, detailed observation of actual teaching group processes.

In her article Rudduck explores principally four main areas:

1) problems of the authority role of the tutor.
2) student responses to seminar teaching and problems encountered by them.
3) strategies for managing the problem of authority, including a useful list of questions a lecturer might ask her/himself about her/his group teaching.
4) three structures for organising small group work (one in Chemistry, one in Literature and the syndicate method) are outlined and critically appraised.

Apart from the informative and constructive ideas and advice offered in the latter two sections, the discussion about the student perspective and the whole problem area of authority of the tutor stimulates the reader to thoughts about those aspects of paramount importance in small group work. Implicit also in the nature of Rudduck's observations of groups and her descriptive examination of students' viewpoints, is the view that much might be learnt by lecturers from such close encounters with processes and perspectives.

Rudduck's book "Learning Through Small Group Discussion" starts from a direct, unashamedly prescriptive premise that the seminar approach is most effectively employed when it takes the form of a participatory, discursive teaching style. The initial sentence of the foreword to the publication makes this clear.

> "Small group work, unlike the lecture, does not imply a presentation of material which is pre-planned. It demands instead a capacity to respond to developing situations in such a way as to maximise opportunities for learning. In this it may be likened to chess. It has its classic strategies, but substantial improvement of performance depends upon the analysis of one's own play and that of others. This book addresses itself to those who for a variety of reasons think that participatory small group work is or may be an appropriate medium through which to pursue their educational intentions."

It is evident from this then that the contents are aimed at those, who are already initiated into this particular style of small group work and confine themselves to exploration of the strategies and techniques appropriate to, and the problems arising out of that particular approach. The study is based on observation and description of video-recording of thirteen case studies of seminars conducted in the discursive mode. Comments are made from this close study about (a) the potential of small group work, (b) both the student and tutor

perspectives on seminars, (c) the problems of student participation and tutor authority, and (d) practical issues concerning both leaderless groups and tutor-led discussions. The empirical nature of this study with its base firmly in the views and experiences of the practitioners and participants is emphasised by the format of the book. Each section is divided into two parts - the issues and the evidence. Rudduck raises the relevant issues in the first part of each section and gives evidence of her issues by the use of extensive quotations from both student and staff participants in small groups. This structure gives the book a flavour of pragmatism, reality and usefulness. She has taken the trouble to listen to and to hear the attitudes of all concerned in the process, to help her reach conclusions. Her sympathy allows her to explore the complexity of the tutor role with greater understanding.

Student (a)

> "(The main problem in talking is) 'who's going to answer first, I would think, more than anything. All looking at each other to see who is going to say something first. Relying on somebody else and nobody does, and by the time you sort of think of it you think "Oh, it's too late now, you know, might as well keep quiet."

Student (b)

> "Well, one minute they'll be saying this idea of the seminar is to help you understand the basics and then you'll make a basic statement and they'll say "You ought to know this by now". And of course if you don't know it they tend to sort of jump on you."

It is this detailed exploration of the perspective of the student, which is the most refreshing and the most original aspect of Rudduck's work. As others have done, (eg Abercrombie, 1960) she looks at issues such as authority, the roles and responsibilities of tutors and practical mattes such as group size and lay-out, yet it is this researcher's view that the most important contribution made to the development of our learning about instructional small groups by Rudduck is the way in which she increases our understanding and awareness of students' experiences in them. This focuses our attention on learning and on the learners, rather than on teaching and the tutors. It is indeed a most valuable focus for the development of understanding of this teaching mode.

**It must be noted, however, that the content is descriptive and reflective rather than analytical and objective. Although she uses the term evidence she provides no scientifically determined proof of her reflections.**

Powell (1986) used a similar methodology to Rudduck, by recording the proceedings of thirteen undergraduate tutorials across a variety of disciplines. His particular interest was in monitoring interactions within groups, but particularly in comparing the patterns of interaction in tutor-led and tutorless groups. His findings make a salutary point for lecturers engaged in this method.

> "Tutors spoke for rather more than half of the time, and when the tutor was absent many students doubled their own contributions and participation was spread more evenly. There was a marked emphasis on providing information in almost all the meetings, but in the leaderless groups this tended to diminish and there was rather more stress on argument."

Powell's main intention in this work was to collect data relating to students' verbal involvement in tutor-led small groups, in order to examine the feasibility of using leaderless groups. However, his findings are useful comment on the verbal behaviour of students and staff, and prompt further analysis of interaction patterns and of the nature of the content of the talk ie whether it is predominately information transference and how far it is analytical or critical. This thesis attempts to take this further by analysing patters of interaction in a larger number of tutor-led groups and by examining in detail the content of questions and responses within these groups.

Thus far, the researchers and writers referred to have been largely concerned with commentary on and observation of the workings of instructional small groups. Some researchers have gone further, as did Heron in his work on interventions in professional groups, into the area of skills' development for lecturers in this field. One of the most detailed, illuminating and at the same time pragmatic and helpful publications, which has appeared in the field of small group teaching is Jacques (1984) most recent book, "Learning in Groups". For the practitioner in higher education it provides the most comprehensive guide as yet available on the aims and processes of small groups for teaching and on procedures and techniques which might be used, in order to improve a variety of skills, which are identified as appropriate to this methodology. In his introduction he identifies his purposes in writing on the subject as follows:

> "My aim in this book is therefore not just to promote understanding but to help improve skills for tutors and students alike and to widen the range of possible group experiences."

Furthermore Jacques makes clear his own views about the value of teaching students in small groups, which goes beyond the acquisition of skills, knowledge and concepts in a given subject area.

> "The title 'Learning in Groups' is meant to suggest that groups are not merely a valuable vehicle for learning about the skills and concepts of a subject discipline, but are also a way of learning about groups both as a means of enhancing academic learning and in the development of abilities in co-operative work for later life."

He states explicitly his own position on learning in groups, which enables the reader to identify immediately the author's particular perspective, which might or might not coincide with his or her own, but which at least makes clear the basis from which the comments and suggestions derive. The four major starting points for Jacques' theories and consequent proposals for improvement tasks and techniques are as follows:

> "1. I assume that students are adults and should be encouraged to learn as adults ....
> 2. Co-operation is a key word in learning groups. Competition in groups may sharpen the critical faculty of a few, but is more likely to dull the appetite for discussion among most ....
> 3. We all learn from experiences, whether happy or bitter ones, but we often fail to extend this learning beyond the immediate fact .... If we were to be a little more observant about what happened and examine, the events and our part in them, then we would be more likely to develop rules and principles to guide us in our next, similar, experience ....
> 4. Despite the pre-eminence of intellectual aims in learning groups it is often the emotional needs and undercurrents, which are more powerful yet most frequently neglected ...."

From these basic premises the book covers a range of topics from learning styles, aims and objectives of small group teaching and communication processes through to the setting out of example training activities, which might be helpful in the development of skills for such work. Jaques begins by identifying the three major problem areas for teachers of groups -

> "Yet when it comes to it, many tutors find the leadership role difficult to perform satisfactorily and fall back with some reluctance on their reserve position of authority, expert and prime talker."

He ends neatly and most constructively by setting out in his final chapter many viable, detailed examples of how staff development activities might be planned and organised, in order to help lecturers not to "fall back" on that "reserve position".

Ottoway (1968) is concerned with the nature of the relationship between teacher and students in groups of between seven and fifteen. He focuses on the opportunity for free discussion and is concerned with the development of a special kind of rapport between the participants. He identifies seven advantages to those involved of this method, and then explores the stages of development of the participative group - beginnings, difficulties for interaction, defensive positions, orientation, emotional involvement, fear of being hurt and/or of facing hostility, therapeutic aspects. His identification of these stages together

with summaries of participant reports, is intended to lead to a greater understanding of the stages of development of relationships within teaching groups, in order that these might be identified, acknowledged and prepared for by practitioners. Fawcett Hill (1969) concentrates also on the roles of participants and on the stages of development of the group, but does so by presenting his step-by-step method of organising group work as a recipe to be followed and practised by others. The formality of his prescription derives from two significant points identified by him for small group teaching - (a) that lecturers using it require some understanding of group developments and dynamics, and (b) that group oriented consideration must, however, not obscure the particular purposes of "subject matter mastery". He therefore proposes a formal structuring which takes account of group processes and which gives an appropriate framework within which subject matter might be most effectively mastered through discussion. Northedge (1975) presents a critical appraisal of the Fawcett Hill step-by-step method, pin-pointing its disadvantages for Open University groups and suggesting an alternative, adapted approach. His formula comprises four stages, reminiscent of the step-by-step discussion technique alluded to by Bligh (1971) and also the "snowballing" technique recommended by Jaques (1984), and which takes account of the two difficulties of confidence-building of students and authority-diminution for lectures, in order to achieve effective participation. This approach together with the evaluative comments by participants, provided by Northedge, constitute a useful guide, and a recipe for lecturers to apply and practise for the improvement of their own technique.

Finally in this section, signal work, which provides us with both theoretical insights and identifications of behaviour patters as well as with approaches which can be incorporated into our own practice is that of Abercrombie, one of the earliest, yet still one of the most authoritative works in the field. Potentially the most significant publication for the development of interest in small group teaching and the encouragement of university teachers' examination and critical analysis of the learning processes of their students is Abercrombie's "The Anatomy of Judgement", (1960). This study of group learning and teaching processes of medical students was the mainspring of the current interest in UK universities in student-centred,discursive group teaching methods. Abercrombie began by examining varied reactions to and perspectives on given visual stimuli. She went on to suggest that the process of reaching a judgement about a given stimulus, whether visual or verbal, by hearing and exploring a variety of interpretations of it is highly significant in the development of students' learning.

> "My hypothesis is that we may learn to make better judgements if we can become aware of some of the factors that influence their formation. We may then be in a position to consider alternative judgements and to choose from among many instead of blindly and automatically accepting the first that comes. In other words, we may become more receptive, or mentally more flexible. The results of testing the effects of the course of discussions support this hypothesis."

This method of group learning was compared with traditional approaches, where a student learns either from messages didactically superimposed by a more experienced authority figure, as in a lecture, or in an individual tutorial by comparing his conclusions or interpretations solely with those of his teacher. Both these methods focus on result rather than process, whereas in the group method described by Abercrombie not only the results were compared, but also the various ways (according to the number of students) in which the results had been arrived at.

> "What the student learns, it is hoped, is not only how to make a more correct response when he is confronted with a similar problem, but most generally, to gain firmer control of his behaviour by understanding better his own ways of working."

In participatory group teaching methods, account is therefore taken of the individual learning contexts into which the stimuli are to be introduced, and the interaction between each individual context and the stimulus is observed by all members of the group. These varied interactions form an essential part of the learning process of the students. The assumption, on the contrary in didactic teaching of all types is that the learning context in each student is approximately the same, and that the emphasis is on the information to be assimilated rather than on the interplay between information and existing context.

It is in the above ideas of Abercrombie, concerning the value of participatory group work, that the most exciting and crucial understanding of the development of students' learning and knowledge is explored. Such exploratory research into understanding learning habits is fundamental to the improvement of both teaching and learning activities at all levels. Out of this study, which focused above all on how students receive stimuli and the processes by which they make judgements in the light of a variety of ways of receiving them, grew the current interest in student-centred learning and teaching procedures amongst researchers in small group teaching in higher education in Britain.

The effectiveness of discussion in helping one to discover one's unrecognised assumptions was described by a student in her project thus:

> "Later in the discussion I find how many angles there are of looking at a problem which somehow do not occur to me. I tend to grasp a few angles and am inclined to cling to them until a few moments of heated discussion compel me to consider all the other many angles."

Abercombie continued her study of discursive methods of small group teaching an produced further publications, such as "Aims and Techniques of Group Teaching" (1979, Fourth Edition) and with Terry "Talking to Learn" (1978). Both of these are also essential background sources for the researcher into small group teaching methods.

Thus the section of the review is concluded, which is concerned with the study of small group teaching within the context of research into professional small group work in general. Several projects have been alluded to, which bear some similarity to this research work. Abercrombie monitored particular small groups in higher education, with a special emphasis on the identification of how medical students might most effectively learn to develop a capacity for judgement. Rudduck and Powell both used recording of groups as an aid to their exploration, in Rudduck's case of the participatory small group with specific emphasis on participant commentary of their experiences and in Powell's case in order to compare interaction patterns in tutor-led with those in tutorless groups. Heron did not confine himself only to the systematic observation of groups in educational settings, rather was concerned with the nature, use and development on interventions in a variety of group settings. All of the above are examples of action research, in that they involve working together with practitioners and that collaborative work helps to shape the direction of the research and conditions the nature of the outcomes and recommendations. This is also a form of action research, in which groups of students and of staff were involved in parts of the analysis as well as being objects of it. What makes this project different from those mentioned, however, are the following:

- the scope of the study, in that more groups across a wider number of academic disciplines are researched and a greater number of staff and students are actively involved;
- there is no pre-determined notion of what constitutes ineffective of effective group work, as is for example explicit in Rudduck's work and implicit in that of Heron and Powell;
- there is no emphasis on any particular academic area, as with Abercrombie, nor indeed that any academic discipline is more or less likely to exhibit particular styles of small group teaching;
- it is rather an attempt to sample and analyse the practice of group work across the university and perceptions of its aims and processes by both staff and students, in order that a greater knowledge is achieved of how that practice might be improved.

It is intended in the next section then to review the literature, which contributed to the development of the research methodologies which were selected, by which these aims, processes and practices of small group teaching were collected and analysed.

## 2) Research Approaches to the Analysis of Teaching

> "The research worker limits himself to the manipulation or studying of antecedents and consequents .... but never once looks into the classroom to see how the teacher actually teaches or the pupil actually learns."
>
> (Medley and Mitzel,1963)

This research project explores some aspects of the antecedents and the consequents of classroom behaviour in university small group teaching, but focuses primarily on features of the actual teaching and learning processes within a representative sample of small group classes in one university. As has been demonstrated in the previous section, it is one of very few existing studies of this nature in higher education. Because of the relative dearth hitherto of empirical examination of teaching room practice in universities, it draws its methodologies principally from work done in observing primary and secondary school classrooms as well as from analyses in settings other than educational. It is intended in this section to review the derivation of the particular research approaches selected and applied. The analysis of sample classes, as case studies of teaching and learning behaviour, became increasingly commonplace in the 1970s, after the lack of it had been specifically alluded to in quotations as above (Medley and Mitzel 1963). Notable exceptions in the 1960s were, for example, Bellack et al (1966) and Massialas and Zevin (1976); and in Britain a powerful stimulus to professional interest in classroom language and the acknowledgement of its significance for learning processes came in the publication "Language, the Learner and the School" (Barnes et al, 1969). It should be noted in the context of this research and of those studies cited above that analyses of such case studies of classroom practice represent the researchers consideration and interpretation of a series of situations and events, which may provide insights into situations and events known to the reader. The word 'insights' is a more appropriate definition of such research studies and outcomes than, for example, the word 'findings'. The communication of such insights, which might find sympathy with practitioners and thereby develop and improve their practice, although it might be criticised as a "literary" approach rather than a purist, systematic and scientific one, is nonetheless a valuable form of developmental research.

> "In some of the approaches considered it is more appropriate to speak of 'insights' than 'findings'. Indeed, where the object of investigation is as complex as language, it is a mistake to look for too easy and rapid results from research. What the best research has done is to deepen understanding of that complexity."
>
> (Edwards and Westgate, 1987)

2 a) Approaches to Recording and Interpreting Examples

When embarking then on the study of events of such complexity as teaching and learning processes in particular contexts, consideration must be given initially to the pros and cons of different modes of information gathering about those processes. Whether the researcher is to adopt a systematic observational, an ethnographic or a discourse analytical orientation to the interpretation of those data gathered, it is important to have thought through the specific implications of different methods of collecting samples for analysis. An initial decision has to be made for example, between immediate logging of observed practice or recording (audio or audio-visual) of events for subsequent interpretation. Simultaneous coding schedules for use by trained researchers proliferated in the late 1960s and early 1970s, and were themselves so numerous that they soon needed to be catalogued and classified. (See Simon and Boyer, 1975, and Galton, 1978). Many such schedules were created as instruments by which practitioners might consider themselves and their students at work, and focus on specific items of their communicating behaviour. Coding systems thus embody the assumption that those characteristics of the transactions between teacher and taught, which are pertinent to the researcher's purposes are evident within the words they exchange and so utterances can be adequately categorised into broadly defined functions as and when they occur. McIntyre and McLeod (1978) have described the principle as that of "looking through talk", the words being treated as primarily conventional tokens of a shared culture which label an objective reality.

Different assumptions underlie the choice to make recordings of events rather than immediate, simultaneous logs. The implication in this case is that the researcher inclines to the view that interaction is constructed a) through the participants' interpretation of many factors **not easily accessible to an outsider** and in ways which are influenced by the very structure of the discourse. Such complexities and subtleties are deemed to defy instant coding, but rather demand patient analysis and re-analysis of particular events and a frequent return to the original recording. It is clear, therefore, that the choice between the two methods outlined above implies assumptions the researcher has about the process of interaction, the nature of the data, and the uses to which the data are to be put. One reason for the choice made in this research project to video-record the samples takes us on to the examination of the concepts of 'action research' and 'triangulation'.

If a researcher has a strong interest in influencing his/her own practice and that of others, the creation of a record - as 'vraisemblant' as is possible - of the events to be considered, which can be shared by researcher, teacher and learners for the advantage of all three, is of paramount importance. The concept of "triangulation" has its philosophical basis in phenomenology. According to Edwards and Westgate (1987) reality is seen, by researchers who incorporate triangulation into their strategy, as residing in the respective perceptions

of observer, teacher and students and not in a supposedly objective account, which is given separately from the participants in the teaching process. The interest of the researcher is in the three-dimensional interpretation made of the events by the actors, as it were, and the observer. Recent notable work which involves triangulation is that of Adelman (1981) and Hale and Edwards (1981). Barnes and Todd (1977) criticised this method by presenting their consideration that it is no more valid, and no more just to participants' perspectives, than observations made by perceptive researchers working on their recordings, transcripts and notes. It may, indeed, be argued that it is no more valid or reliable, but it can be asserted that it has more chance of drawing the practitioners into the investigations, thereby involving them as action co-researchers, and subsequently influencing practice more profoundly. The parts of this research which incorporated the group participants into the examination of processes and the antecedents of processes, ie the aims, intentions and expectations, were influenced by those writers, who have promoted concepts of action research and of teachers as researchers, such as Ebbut and Elliott (1985), Elliott (1985), Pollard (1985) and Skilbeck (1983).

An additional purpose in involving the "actors" in the analysis is to counteract difficulties of what constitutes reality and the disturbance of reality by observer activities. The contention is that the more the three players inter-relate before, during and after recorded events, the less disturbing the observational activity on the phenomena being observed. This disturbance effect is often referred to as "the observer's paradox", an expression first formulated in the context of linguistics by Labov (1972), when he alluded to the need "to observe how people speak when they are not being observed". The effects of observer activity in classroom research have been variously documented by Samph (1976), Wells (1981), Blease (1983) and Wragg (1984). Since the effects of "the observer's paradox" have been acknowledged, but not as sufficiently disturbing to detract totally from the value of observational study, some researchers have sought ways of minimizing the interference and/or of assessing its residual effects. For example Milroy (1980) in her work on vernacular speech patterns cleverly gained for herself an accepted role as someone who was regarded as one of them by the groups she was recording. Similarly, Westgate (1985) in his work in foreign language classrooms, purposely drew attention away from his role as researcher by beginning by jointly teaching the classes alongside the normal teacher, before going on to record the classes at a later stage. These above attempts to counteract the "observer's paradox" problem informed the decision in this research to build into the group participants' comment sheets a section which attempts to monitor the residual effects of the observing activity (see Appendices One and Two).

Having thus explored some of the arguments for and against different methods of accumulating data, it is now the intention to proceed to a discussion of the varying methods

which might be employed to analyse the data collected. Three broad methodologies are examined, after which a case is made in the concluding of this section for an eclectic approach.

2 b) Systematic Observation of Teaching and Learning

This method of analysing recorded classroom data means simply that the observation is contained within a system of categories, predetermined by the researcher. The mainspring of the numerous studies conducted in this way was the lack, largely until the late 1960s, of any detailed evidence from classrooms themselves. No branch of social science had yet shown any strong interest in interactions in classrooms, and socio-linguistic research had barely begun. This approach then is firmly rooted in educational research and most particularly in attempts to improve the training of teachers. Medley and Mitzel (1963), in their article which anticipated future developments, argued for the training of teachers to proceed beyond the stage of "witch doctors" passing on to their acolytes "a treasured store of traditions" to its being grounded in properly scientific accounts of those teachers activities, which can be demonstrated to have positive effects on pupil learning. This seminal work signalled the eventual move from education of teachers according to hunch and instinct to their education by empirical investigation of behaviour and practice. In employing interaction analysis schedules to such investigations the emphasis was not so much on deriving prescriptions for good practice which might be disseminated, but rather on enabling teachers themselves to record and analyse their own practice, and subsequently to relate it to their intentions, identify any mismatches between intentions and practice, and ultimately act on their insights and monitor the successes of those activities. Compilations of schedules designed to aid the improvement of practice have already been referred to (ie Simon and Boyer, 1975 and Galton, 1978), but it is appropriate here also to allude to some of the more influential and most used schedules such as FIAC (Flanders, 1970) and VICS (Amidon and Hunter, 1967). These early category systems for analysing verbal interactions provided a basis for the development of schedules for particular purposes eg for use with student teachers in developing classroom skills (Wragg, 1972 and 1973), for use in specific curriculum areas eg STOS (Eggleston et al, 1976) - a Science Teaching Observation Schedule, and for use as part of micro-teaching procedures, (Brown, 1975). Such studies as these served to provide evidence that, for example in whole-class teaching, teachers did most of the talking, decided who would talk, and normally set the rules for what pupils were permitted to say (see Friedrich, 1982). They also provided evidence of the number and nature of questions used by teachers in classrooms, most of which prompted brief, factual responses rather than lengthier analytical ones (see Hunter, 1972 and Hargie, 1978). Adams and Biddle (1970) commented on classroom ecology in their observation that most

communication in whole class teaching occurred within what they called a "central action zone" which left considerable areas of the room "safe" for those students, who did not wish to participate.

It was from research projects such as these above, which employed systematic means ie predetermined schedules for analysing specified behaviours, that this researcher's interest derived, in observing and analysing specific behaviours, such as amounts of talk, nature of transactions, types of questions etc. in small group teaching in universities. It had not yet been done in any systematic and comprehensive way in teaching rooms in higher education. If effective strategies could be developed to enable teachers in primary and secondary schools to observe, analyse, develop and monitor their practice, then there was good reason to suppose that these might be successfully adapted and applied to other educational contexts. Moreover, similar systems had already been devised for the study of adult groups in other professional settings (see Heron, 1975 and others already referred to previously in this chapter). However, although systematic techniques might usefully be employed to analyse some aspects of the data gathered, consideration had also to be given to ethnographic approaches, proponents of which had variously and vehemently undermined the methods of the interaction analysts.

### 2 c) Ethnographic Approaches to Analysing Teaching and Learning

By the mid-1970s insistent attempt were being made to undermine the claims of the systematic researchers that they could record objectively specific features of classroom reality. The very strengths which interaction analysts were examining for their research ie the detached outsider view, objectivity, focus on specific behaviours for examination, were identified by other researchers as weaknesses and the results described as deriving from restricted focusing only on what lay within the observer's limited frame of reference. Originally ethnography had been a mode of anthropological enquiry based on extended observation so as to gain access to the views of reality of those being observed. The ethnographic label, sometimes referred to also as interpretive or qualitative, has been used to cover a wide range of studies of the classroom, from the loosest to the most rigorous examples of case study analysis. Interpretive researchers' objections to pre-coded observation schedules include the following. It is argued that teachers and taught in every classroom treat much of what is being said as an index to more extensive understood meanings, some of which they both bring from outside the specific situation being observed, and others they have accumulated during the course of their own preceding and current interactions. Thus coding only what is communicated on specific occasions misses out much of the implicit agenda, which has been determined by those other external, influencing factors. Ethnographic researchers are therefore obliged to be aware of the

potential danger of imposing an observer view of what is happening ie of superimposing on to what they observe meanings drawn from their own frame of reference, which is of necessity different from those of the participants.

The interpretive approach to the study of classroom communication processes has its roots in the ethnographical study of communications in the Social Sciences, which had as its principal theoretical purpose the discovery of how talk is systematically patterned in ways which reveal or define, how the speakers perceive their relationships and the situation. Blom and Gumperz (1972) asserted that such talk may then become broadly predictable "on the basis of certain features of the local social system". If, then, we take the teaching room and the teaching/learning relationships as constituting the "local social system", study of the way the participants in that setting perceive the nature of it and their relationships within it, should help us towards insights, which might help to predict behaviour and outcomes. And so ethnographic modes of researching classrooms involve the protracted, detailed, interpretive analysis of events, contexts and all participants. Corsaro (1981) details the laborious nature of the task of interpreting patterns in classroom talk, which involves treating any patterns perceived in the interaction as provisional until checked against more and more data until a sufficiently close 'fit' is established. This implies, therefore, that recordings and transcripts are required, which permit the analysis and re-analysis of the interactional meaning of any utterance in the sequence in which it occurs. Hammersley (1984) asserted that for his own research "transcripts of natural talk" were the only adequate form of data, which would furnish him with the basis from which he might express meaningful insights.

An additional feature of interpretive research as well as that of detailed interative analysis of transcripts and recordings is that of the involvement of participants in the processes being observed. The involvement of students as participant observers, who can be used to evaluate the teacher's and the observer's capacity to explain accurately the nature of the processes, has been evident in several studies (See Davies, 1983; Delamont, 1983; Beynon and Atkinson, 1984 and Measor and Woods, 1984). By such involvement the interpretive researcher becomes familiar with and to both teacher and students. His/her task is to observe and make a lengthy log - a running record - of a series of classes, recording verbatim as much of the interaction as possible and practicable, and then analyse frequently recordings and study intensively transcripts, until some patterning is observed, which is then checked out by further scrutiny of the data. In research conducted according to this methodology, the insights and findings depend usually heavily on detailed interpretation of transcript material. The transcripts included may be as long as a whole teaching session (Hammersley, 1977) or be fragmentary and offered as a short representative example of a specific teacher's style (Robertson, 1980). Extracts used may also highlight notably unusual features of interaction (see Burgess, 1984). Usually extracts presented, whatever their

length, are followed by commentary which underlines the significant characteristics. One important factor to be borne in mind when considering this sort of commenting on transcripts is that the interpretation of it is heavily dependent on contextual information, which only the researcher has and which the reader must take on trust (see Edwards, 1981). Subjectivity is then implicit in this particular method of enquiry and indeed no claims are made for its objectivity, as is the case with systematic researchers.

The parts of this research project which were specifically influenced by the sorts of ethnographic analyses outlined here, were the qualitative interpretations of extracts from particular group sessions and also the analyses of lecturers' and students' expressed aims for, expectations of and preferences in small group teaching. From the preceding explicit identification of both quantitative and qualitative research influences on the methodologies selected for this study, it is evident that an eclectic approach was preferred. This included not only techniques from the two schools already discussed but also, although to a lesser extent, from a further separate research orientation - discourse analysis.

### 2 d) The Analysis of Discourse in Teaching and Learning

The term "discourse analysis" has both general and specific connotations. As a general label it can mean any study of discourse, but it acquired a particular meaning as a system of analysis in the pioneering work done in the 1970s by researchers, such as Sinclair and Coulthard (1975). Many researchers have subsequently agreed with their acknowledgement of classrooms as "attractive research settings" precisely because "... teacher - pupil relationships are sufficiently well defined for us to expect clear evidence of this in the text." The origins of this research approach applied to classrooms lay in socio-linguistic studies. Socio-linguists had already been focussing attention on, for example, the specific communicative demands made on pupils in classroom settings and the continuities and discontinuities between those demands and their experience of language used in the other main settings of their social world (see Cazden et al, 1972).

One way in which discourse analysis might be differentiated from the systematic and ethnographic approaches might be to regard this as a means of considering talk as a medium to be looked at, rather than as a mirror to be looked through. In this sense, examination of the structure of the discourse also captures the structure of the events to which the discourse inherently belongs. Coulthard (1977) provides us with a guide to identifying discourse analysis by contrasting this approach to exploring processes in the classroom with that of both Flanders (1970) and Barnes et al (1969). He approaches his comparison from a linguistic perspective asserting that there are serious, inherent dangers in neglecting either the sequencing and patterning of the discourse or the role of specific utterances in the building up of meanings.

Some of the most salutary work done in the area of questioning in classrooms derived from Dillon's (1982) analytical study of questioning sequences in teacher - pupil discourse. He challenges the assumption that supposedly "higher-order" questions elicit "higher levels" of pupil thinking by saying that there is no empirical basis for this supposition in studies of questioning consequences. As substantiation he uses evidence of questioning gathered from the discourse of other professions, which suggests that other professionals eg interviewers, counsellors, lawyers have a tendency to use questions for the specific purpose of keeping the respondents' answers brief and non-thoughtful. Dillon's work puts a question-mark over questioning as a strategy in classes and certainly suggests that it is over-used and its efficacy much more limited than is generally thought. His conclusion is a challenging one -"Ask a higher-level question, get any level answer", and his recommendation daunting to those schooled in the traditional teacher-question, pupil-answer practice - "Only question when perplexed". The preliminary work on the nature of questions and responses in university small groups in this thesis was, in part, stimulated by this thought-provoking commentary on elements of classroom discourse. Further examples of significant, socio-linguistic analysis of classroom discourse can be found in Stubbs and Delamont (1976), Stubbs (1983) and Wells and Nicholls (1985).

Much attention has been focussed in this field on the classification and functions of questions, whereas perhaps surprisingly, less has been directed to a parallel much-used area of instructional discourse - explanations. Early studies in this (for example, Smith and Meux, 1970) drew more on logic than linguistics in the methodologies applied. Martin (1970) however, had recognised that to explain effectively is to do more than sequence ideas and arguments logically, rather it involved the explainer making links with existing knowledge as well as developing an understanding of the recipients of the explanations. Brown and Armstrong (1978) devised, in their "System for Analysing Instructional Discourse (SAID)" ,an instrument which can be applied to expository lessons. In the presentation of their system, Brown and Armstrong identified its derivation as being not only in linguistics, but also in "logic, psychology .. pedagogy and everyday English".

In conclusion, it should be noted that critics of discourse analysis find its strong association with precise, linguistic study too constraining as a tool for the examination of classroom events and interactions. It is certainly questionable whether any one single discipline (and certainly the majority of early discourse analysis studies of classrooms do emanate from the academic area of linguistics) can on its own adequately and effectively explore interactions, which would seem to demand, in addition, other theories of human communications' behaviour. However there is evidence that more recent work combines linguistic, sociological and psychological perspectives, most particularly that carried out in multi-

cultural settings (see Erickson and Mohatt, 1982; Heath, 1983 and Ainsworth, 1984) and also in those examinations which concentrate on comparisons of children's experience of discourse in various settings.

### 2 e) The Arguments for Eclecticism Summarised

In this research project, both in the data-gathering and the data-analysis phases, an unashamedly eclectic approach was selected and adopted. This may attract criticism from research workers at the purist end of the continuum. However, it is argued that the vary nature of the work, as the first extensive, systematic study of small group practices in a variety of academic areas in a university setting, required the application of a repertoire of analysis procedures to identify diverse insights and issues, which might subsequently be further explored. It is also contended that benefit should be derived from the past experiences of classroom researchers at other levels of education, who had begun their work in the 1960s and 1970s within different, inflexible and frequently mutually hostile schools of research, only to acknowledge later, in many cases, that a more flexible and eclectic approach might be appropriate. It should be noted, however, that several writers have argued the case against a blend of methodologies. Delamont (1983) for example, asserted that it would not be easy to effect a rapprochement between systematic and ethnographic approaches to the observation of teaching, because they have at their basis opposing conceptions of the nature and objectives of research. Mehan (1979) labels his own approach "constitutive ethnography" and in doing so separates it from both the systematic traditions and what he calls the "loose" ethnographic studies of the late 1970s. He represents all three approaches as irreconcilable.

Nonetheless Edwards and Westgate (1987) present a convincing case for eclecticism, when they make the following comparison between pure and blended methodologies.

> "The former [pure] is more likely to gain from its consistency the appearance of rigour; a more eclectic approach may be more realistic where the phenomena being studied are highly complex and many-faceted."

Sinclair and Couthard (1975) also emphasised that they saw their application of structural analysis to various classrooms only as a beginning phase which might productively be followed by more general, multi-methodological examinations. Hammersley (1981) also implied eclecticism of approach when he maintained that consideration of participant teacher and learner intentions and expectations is as at least as essential to the exploration of classroom interchanges as routine linguistic examination of meanings.

For this researcher an important question in determining the methodologies to be applied was - how theoretically rigorous would it be necessary to be, in order to express some useful and effective insights concerning the complexities and subtleties of interactions in

small group teaching and learning? In attempting to answer that question, the choice of an eclectic approach was guided by the ideas of Romaine (1984), when reflecting on the 'pure' area of research in determining his own strategy for his work in children's language development.

> "In deciding to adopt one methodological strategy rather than another,there can be no question of choosing one method which will be universally the 'right' one. Methodology can be evaluated only within the context of some question which one wants to answer."

Even more so this research project, envisaged as it was an early, extensive, systematic study of practice, was concerned with the raising of questions as much as the answering of them. The arguments for eclecticism might be summarised as follows: appropriateness of choice of instruments for specific research tasks. Several analytical tasks were regarded in this case as appropriate to the diverse data gathered (ranging from commentary by lecturers, commentary by students to transcripts of video-recorded groups), in order that useful insights might be made, with which practitioners might empathise and subsequently incorporate into their own thinking about their teaching. The case is therefore made for the specific design of this experiment, which is detailed in Chapter Three.

3) The Backcloth to the Implementation of Staff Development

A project of this kind, which has as its major intentions the offering of insights on current and on effective practice in small group teaching in higher education and the recommending of issues which might usefully be explored further by both researchers and practitioners, would be incomplete without consideration of how such insights and recommendations might best be incorporated into staff development practice. This aspect is addressed in Chapters Eight and Nine, and this section of the review is concerned with tracing the background to current staff development provision in universities.

The starting-point is with three significant Reports, which were published in the 1960's:

> The Robbins Committee on Higher Education (1963)
> The Hale Committee on University Teaching Methods (1964)
> The Brynmor Committee on Audio-Visual Aids in Higher Scientific Education (1965).

The findings and recommendations of these Committees caused ripples in the hitherto calm, even stagnant waters of university teaching in the United Kingdom, and stimulated at that time an upsurge of interest in and research into the effectiveness of a variety of teaching and learning methods in higher education. These reports came, however, at a time of national economic well-being, when the expansion of higher education could be

foreseen and recommendations made, which relied on generous staffing quotas for the suggested increasing student numbers, and on magnanimous budgets to enable the installation of more sophisticated teaching aids and equipment. This study of small group teaching, its conclusions and its implications for staff development come at a very different time. The current climate, might prove far less conducive to improvement, despite a prevalent recognition on the part of Government, CVCP, and UGC of the value of developing mechanisms, by which we might appropriately, usefully and more systematically analyse and improve the performance of university teachers in all areas of their diverse work. Indeed the very recognition by Government and the above cited central bodies, together with the ways in which that recognition manifests itself currently, might prove counter-productive rather than constructive to the development of an environment in which academics would feel motivated to analyse and refine their teaching skills. It is imperative, therefore, when considering strategies for the implementation of programmes for staff development with small group work that the context, within which they might be introduced, be carefully examined. It is to this end that the current literature on the present and future developments of higher education institutions is now analysed.

3 a) Reports from Central and Government Bodies

Several sources of publications furnish the researcher with such details. Firstly, reports emanating from Government Committees and from Committees appointed by the CVCP and the UGC are examined. The 1970's and 1980's will go down in the literature of the future as a period, in which the Government of the time challenged the perceived complacency of the universities and stressed the need for greater professionalism, development and updating for their staffs.

> "All teachers in higher education should have opportunity and encouragement to develop and update professional skills and knowledge .... Effective staff development will not happen without a formal institutional framework for evaluating performance and for responding to development and training needs. Institutions and employers should develop their arrangements in these areas and should adopt a more systematic approach to raising the professionalism and adaptability of their staff."
>
> (Government Green Paper, May 1985).

The partially positive tone of this quotation suggested in such words as "opportunity" and "encouragement" as well as in the notion put forward of enhancement is tempered in other sections of the Green Paper by references to "answerability" and "accountability."

> "Meanwhile, however, there are outstanding questions about the answerability of the universities when there are complaints from students, staff or the public. The Government is concerned about the present apparent lack of accountability and is discussing with the CVCP what might be done."

At the same time the body, with which Government was discussing this issue, the CVCP, was conducting its own analyses of aspects of higher education. Two significant reports of Committees appointed by the Vice-Chancellors and Principals were published in 1985 and in 1986. These were respectively "The Report of the Steering Committee for Efficiency Studies in Universities" (The Jarratt Committee, March 1985) and "The Future of the Universities" (CVCP, January, 1986). In both these reports emphasis is given to the importance of staff development. The Jarratt Committee comment on its significance for the improvement of performance both for the benefit of the individual and also for constructive institutional growth and progress. Staff appraisal is linked by them with staff development and both are recommended as essential areas for attention and extended provision. It is in the Jarratt Report also that we read of the necessity of staff development provision for all staffs, not just academics, although the emphasis is on improvement in that area.

> "A regular review procedure handled with sensitivity, would be of benefit to staff, and to the university as a whole. In considering the form of staff appraisal system for a university three main objectives can be identified:
> a) Recognition of the contribution made by individuals.
> b) Assistance for individuals to develop their full potential as quickly as possible.
> c) Assistance for the university to make the most effective use of its academic staff.
> We commend an annual review system on this basis as is the practice in the best staff development systems used elsewhere."

In the CVCP report "The Future of the Universities" (1986) statements and suggestions are made, which allude more directly to the learning experience of students and to the teaching processes.

> "Universities keep their courses up-to-date and are alert and receptive to changing needs of the economy and society. More should be done in the teaching process itself to develop the personal skills, such as effective oral presentation and team work."

This quotation has great relevance to this particular study, since the implication is that course content is reviewed and new knowledge incorporated into the various areas of study, however that staff development provision is needed to encourage ways of teaching and encouraging student learning, which enable the students to express their ideas and to

collaborate in the development of them. This suggests a greater emphasis on group work within the universities' curricula. Such an emphasis is further underlined in the report, when the desirable competences of graduates are described.

> "Graduates with highly trained minds should be able to work alone or in groups, to think systematically, to assemble and examine evidence objectively, and to form and express conclusions cogently and persuasively adapting to circumstances."

It is salutary to reflect on how much or indeed how little of current curriculum and course design, and of current teaching methodology in universities is devoted to the sorts of enabling opportunities, which might result in the above suggested desirable outcomes in graduates. Later in this chapter Abercrombie's (1960) ideas on the development in students of the capacity to made judgements and form conclusions, are more extensively explored with reference to experiments with small group methods. It is also, however, equally salutary to reflect on how little incentive Government and other central committees give to academics to concentrate on enhancing such teaching skills. On the one hand emphasis is given to arguments in favour of reviewing and updating such professional skills, on the other hand university departments are assessed for the purposes of resource allocations by measures of their research involvement, the methodologies of which exercise are kept secretive and covert (UGC, 1985). Such dichotomous approaches do nothing to help academics decide on priorities which might be productive to their overall professional development, but rather lead to further confusion of what is demanded of them. It is also interesting to note, that whilst the UGC arm of Government is advocating review and appraisal of existing practices, which implies a greater degree of openness to examination and analysis, it is itself unprepared to expose the workings and methodologies of its own surveys to healthy, critical analysis. This does not (a) set a worthy example of openness to individual universities nor (b) encourage universities to understand or even trust the exhortations which emanate from this source.

Simultaneously with the above two reports by CVCP-sponsored committees a draft paper by a group again set up by the CVCP was being prepared. The "Academic Standards Group" chaired by Professor Reynolds produced its paper (1986), which also contained allusions to the monitoring of staff performance and the importance of appraisal and staff development. This group recognised the fundamental importance of maintaining the quality of academic staff, if standards in higher education are to be sustained.

> "The academic standards of courses and the standards which students achieve will above all be affected by the commitment, teaching skills and performance of the staff involved .... Most universities do and all should have appropriate procedures for an effective system of regular appraisal of all staff during their careers to ensure that individuals satisfactorily meet their responsibilities and that any necessary guidance and assistance is given in regard to career development."

The emphasis in this extract is more on the negative aspects of appraisal than on the positive functions referred to in the Jarratt Report. As Nisbet (1986) points out in his excellent article on "Staff and Standards",

> " ... 'meet responsibilities' implies detecting inefficiency and 'necessary guidance' suggests authoritative direction."

Indeed Nisbet's thesis, referred to also in the Introduction, in response to the quotation from the 1985 Green Paper - "Effective staff development will not happen without a formal institutional framework for evaluating performance .... ", - is a most interesting one:

> "The point could have been made the other way round; a formal framework for evaluating performance should not happen without effective staff development."

Nisbet's emphasis seems to be that provision for staff development in all areas, whether it be small group teaching or any other aspect of a lecturer's duties, should be available as a pre-requisite to any appraisal exercise, indeed that staff development is the essence and primary aim of appraisal.

The UGC has also entered into the recent published commentary on staff development. In the document, "A Strategy for Higher Education into the 1990's" (1984), the current inadequacy of staff development in universities is alluded to again in the context of the monitoring of performance and of staff appraisal.

> "It is the responsibility of departments to monitor teaching and make sure it is effective .... Staff appraisal has become much more searching and constructive for professional staff in many organisations. In the universities there are modest staff development programmes and some systematic induction of new staff is now common. This is not sufficient."

How far can this statement of inadequacy of staff development provision in universities be substantiated in the literature?

### 3 b) Writings on Staff Development Provision

It is certainly true to suggest that academic staff development provision has been neither systematic nor comprehensive. Commenting on this area in his chapter on "Personnel

Management" in "Universities: The Management Challenge" (Lockwood and Davies 1985), Beck describes the approach of the universities to the provision of staff development as follows:

> "... their approach has typically been permissive rather than directive. Consequently their *modus operandi* has been in channelling the energies of a committed few towards the participation of the interested few in the community."

Again the somewhat disjointed, erratic and perhaps superficial nature of the organisation of this function in universities was pointed up by Matheson (1982) in his detailed review of university staff development provision, when he was Co-ordinating Officer of the Co-ordinating Committee for the Training of University Teachers.

> "... in general, universities responded to initiatives by individuals and/or external training agencies and established training/development facilities, procedures and practices without consciously formulating philosophies to underpin their actions."

The actual provision of centres or units within universities to cater for staff development needs was also examined by Nisbet and McAleese in 1979 (in Teather, 1979). They reported that by 1978, twenty of the forty-five British universities had introduced centres or units to provide opportunities for the improvement of university *teaching*. The focus in the establishment of such sections was on the development of approaches to teaching and learning, with a similar emphasis to that within Educational Development Units in Polytechnics, rather than on the overall professional development of academic staff. The processes of information-gathering about training and development needs has been organised traditionally in both polytechnics and universities according to the preferences, interests and enthusiasms of the staff (very often part-time) appointed to such centres and units. Until recently there has been little discussion of a formalised approach to needs' identification and analysis, as for example staff appraisal might be viewed as one such formal procedure. As Matheson and Beck partially suggested, the impact of such training and development as existed and exists currently for academics in universities, is limited to the few enthusiasts and the several colleagues who are enthused in either the short or long term by them.

Another reason for this small impact and limited effect of staff development units has been further pointed out by writers such as Piper and Glatter (1977), who commented that there has been little attempt on the part of staff working in such units to relate their activities to the development of those professional skills necessary in order to respond effectively to the challenges of changing organisational requirements. Although the staff developers may themselves have perceived a relationship between the provision of development for

individuals and subsequent improved capacity of the total corporate institution to respond more professionally, efficiently and effectively to changing needs, such a link has not been made explicit.

It has thus been possible for academic staff in general in universities, for central committees such as CVCP and UGC and thereby for Government itself to view such provision as exists as a sporadic, limited, disjointed and perhaps largely ineffective effort by a few, undoubtedly extremely knowledgeable and skilled enthusiasts. It has therefore had insufficient impact and influence on individual lecturers, individual institutions and the university system as a whole.

On a more positive note, however, it should be reported that there has been a recent, encouraging response to the acknowledged inadequacies in staff development and to the anticipated effects of the introduction of staff aprpaisal. A proposal for the establishment of a national training unit was formulated in 1987 by the CVCP and put forward to the UGC for consideration for funding. This funding was granted in the summer of 1988 and the proposed unit, now entitled the CVCP, Universities' Staff Development and Training Unit has been set up with the following purposes:

(i) to stimulate provision for the training and development **of all categories of university staff** in order to improve their performance and that of the institution;

(ii) to promote such provision principally **by encouraging universities' own activities both locally and regionally;**

(iii) to act as a national resource centre in terms of expertise and for **the dissemination of information** and training materials;

(iv) to publicise achievements, **promote an awareness** of further development **and identify likely future needs;**

(v) to **establish a network of contacts**, at all levels, for colleagues concerned with staff development;

(vi) to organise **a restricted programme of special events** to meet a national need, for example for vice-chancellors and principals and their immediate and most senior colleages, and trainers and staff development officers;

(vii) to consider possible endorsement of, or provide **some form of accrediation for,** courses run by other organisations.

A report, published very recently by Brown (1989) also gives some cause for encouragement, in that it identifies universities' responses to the previous CVCP Code of Practice on Academic Staff Development (Brown, 1986). It certainly appears from this most recent survey of developments within universities, that provision is increasing, albeit

gradually, and that the effect of the Code of Practice and of other current moves in higher education, eg implementation of staff appraisal, are beginning to effect a meaningful change.

3 c) Staff Development and Staff Appraisal

Such sceptical attitudes lie at the basis of the current increased interest in and discussions of staff development. It has been seen in the quotations and comments included in this brief overview of the recent literature on staff development issues, that the contemporary debate invariably associates staff development with staff appraisal, whether it emanates from Government and central committee sources or indeed appears in private publications. It is this researcher's view that such a link is not only implicit and indissoluble, but should also be encouraged and fostered, in order to achieve:

the most effective forms of staff development of universities;

the most appropriate and efficient systems of appraisal within universities.

Moreover, the word *link*, implying as it does the connection only at one point, of one discrete function to another, is not regarded by this author as an appropriate metaphor. The two functions of staff development and staff appraisal are not discrete, but are fundamentally interrelated and should be integrated as follows:

**FIGURE 2.1**

An Integrated Model of Staff Development and Staff Appraisal

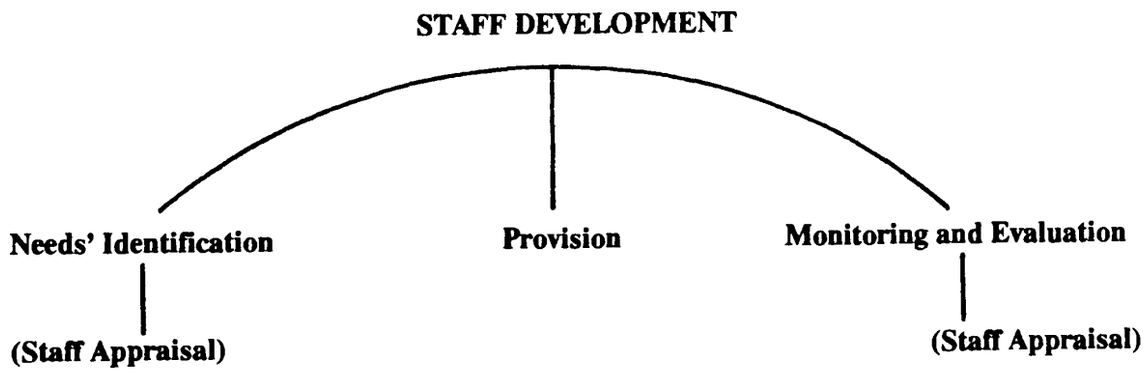
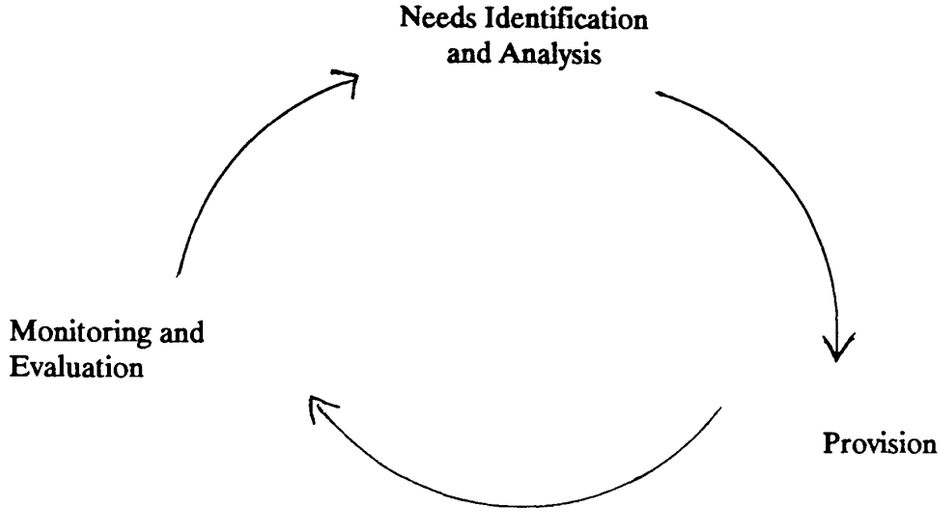



Figure 2.1 illustrates the nature of this interpretation of the relationship. Staff development, which means both the development of individual staff and the development of the staff as a whole, ie the corporate institution, is depicted here as the *umbrella* term,

within which the staff appraisal exercise fits, an intrinsic part of two of the three fundamental implementation phases of staff development. These three phases might also be depicted cyclically thus:

**FIGURE 2.2**

**THE STAFF DEVELOPMENT CYCLE**




It might be argued, therefore, that staff appraisal is the most comprehensive mechanism of needs' identification and of monitoring and evaluating development, which would enable much more thorough provision of staff development in areas identified regularly by staff themselves. Until recently staff developers may either have been regarded or indeed have viewed themselves as having an "icing on the cake" function, whereby only *those* motivated colleagues have joined in arranged activities who are largely *per se* competent in the performance of the tasks, which make up their job. It might be that a staff development scheme of appraisal would enable training and development to be incorporated into the *cake* itself and thereby fulfil a more productive function for a greater number of staff. It should be noted, however, that a managerial model of appraisal (See Pollitt, 1987, for a detailed analysis of the three models of appraisal in current use - the managerial, the professional development and the consumer models) would prove inhibiting, unnecessarily threatening and therefore, counterproductive to the progress and growth of staff development in universities. The interpretation and implementation of staff appraisal should be most carefully considered by all involved in the decision-making whether outside or inside universities, in order that the most constructive, viable and supportive system or choice of systems is recommended. A pre-requisite for such careful consideration and appropriate suggestion of systems is a deep knowledge and appreciation of the nature of all aspects of academic work in universities, and of the prevailing collegial approach to the undertaking of that work, which is essential to its successful completion. Appropriate further reading, in addition to Pollitt's work in the area of staff appraisal for universities,

would be firstly the recent publication on appraisal of and training for teaching by Elton (1987). This contains a compilation of articles written over the past twenty years in both the areas designated in its title. It provides useful background reading to the issues raised above, surrounding the introduction to appraisal of performance in higher education. Another thoughtful and detailed article, most particularly informative and stimulating in its identification of the benefits of appraisal and of suggested criteria by which it might be conducted with academics, is that written by Pennington and O'Neill (1985). First published in Teeside Polytechnic's "Network for Educational Development and Innovation" No.1. January, 1985, it provides an interesting basis for other institutions, on which they might formulate their own ideas concerning models and criteria for the introduction of appraisal in their own situations.

This brief sketch of the contemporary backcloth to the implementation of staff development has been written in order to indicate the following:

i) that the climate is now very different from that of the seventies, when staff development grew as a luxury for the initiated few in times of expansion and affluence;

ii) that the background now is one of unprecedented Government interest (some might say interference) in the workings of universities;

iii) that central bodies are currently exhorting universities to "meet certain key requirements .... (i) introducing arrangements for staff development, appraisal and accountability" (Jarratt, 1985);

iv) that such encouragement is, however, firmly and explicitly linked with appraisal of performance, some of which, it is suggested, needs to be remedied;

v) that such a framework of implied inadequacies surrounding the growth of interest in staff development has profound implications for the level of motivation in academic colleagues to engage in arranged activities;

vi) that all those responsible for staff development must be aware of this change in attitudes and its potential both positive and negative effects;

vii) that anyone wishing to present research which indicates the need for staff development in a specific area, eg small group teaching, is impelled to take all the above literature into account, in order to create approaches and methods which are sensitive to this new environment.

It is of paramount importance to be aware now that, in the identification of needs in teaching and learning development and the presentation of ideas to service such needs,

researchers and staff developers value the significance of awareness, sensitivity and strategy in the execution of programmes at least as much as the skills of workshop design, content and methodology.

Summary

This review has attempted to provide both citation and analysis of the frames of reference, within which the research project has been designed and developed. Three major contextual areas have been explored - the nature of small group teaching as identified in previous studies both within education and outside it, a range of methodological approaches which have variously been applied to the study of teaching and learning practices, and the state of staff development, its readiness for the incorporation of the sorts of insights and recommendations proffered within this thesis. The following chapters owe much to the ideas and arguments in the studies, which have been cited and considered.

# CHAPTER THREE

# DESIGN OF THE EXPERIMENT

Intentions of the Project

This research project is, in essence, an analytical, in-depth study of the processes of teaching and learning in a sample of instructional small groups drawn from a range of disciplines in The University of Nottingham. The aims and expectations, which the participants in those groups have for their small group learning and teaching sessions, are investigated and the processes within the sessions are analysed by both systematic and interpretive means, as described previously in Chapter Two. The final chapters contain commentary on recently conducted surveys in one university concerning current levels of motivation for staff development, in order that the context is explored, into which the insights derived from this research project might be introduced. An awareness of the context and present climate is crucial to the effective introduction of staff development strategies and activities, which derive from the research findings of this study. In brief, then, the precise intentions of the researcher in the design of the experiment were:

1) to collect information from teachers and learners in small groups in the university about their aims for and expectations of small group teaching;
2) to collect a representative sample of video-tapes of small group teaching in Arts, Social Science and Science areas;
3) to analyse aspects of the video-recordings by both systematic, quantitative methods, eg, interaction analysis instruments and by interpretive approaches;
4) to create, therefore, a research methodology, which would draw upon both the interaction analysis and the ethnographic models mentioned in Chapter Two, which are, in fact, not dichotomous, as is often thought to be the case;
5) to involve some of the subjects of the study (both lecturers and students) at certain stages of the investigation, so that the research is hermeneutical rather than purely behavioural in orientation.
6) to consider the context, into which the research insights and consequently recommended staff development strategies might be introduced, in order that the most effective means of acting on the results might be deduced.

Although small groups in teaching in higher education have been examined before in projects such as Abercrombie's with medical students and Rudduck's at East Anglia, no research so far has analysed in detail with the use of systematic, scientific instruments as

well as qualitative methods as wide a sample of classes as in this project. Nor has there been any attempt previously to relate the findings of a project to the potential receptivity to them within the current university context and climate.

The Data and Collection Procedures

It is now proposed to outline the nature of the data and the method of collection. In assembling the samples of teaching the following six variables were borne in mind and an attempt was made to provide examples of small group teaching which incorporate them.

1.(a) the subject area - academic disciplines

(b) the content of the material to be covered within that area (eg modern languages - a language and/or a literature class).

2. the number of participants in the class. (In general any number between three and sixteen has been regarded as a small group for the purposes of this project).

3. the level of the students, ie whether first, second or third year etc.

4. the length of teaching experience of the staff member concerned.

5. the status of the staff member concerned, ie lecturer, senior lecturer, professor, etc.

The technique chosen for recording the activities of the small groups was that of video-recording. The principal disadvantage of this method, as has been alluded to and delineated in Chapter Two, is the potential inhibiting effect of the equipment, technicians, observers, etc on the group processes. An attempt was made, whenever possible, to offset this potentially unnatural effect by locating the bulk of the equipment in an adjacent room, leaving only the camera/cameras and the camera operator in the teaching area. Another device used to try to trace the effect, if any, that the equipment etc had on the workings of the group was to ask some participants to complete a comment sheet, part of which questioned how far they felt this class differed from the normal one.

It was considered, however, that the advantages of the video-recording method for the purposes of this research considerably outweighed the disadvantages. The researcher has a permanent record of the setting, activities and interactions (verbal and non-verbal) of the group, which can be observed and analysed *ad infinitum* and with which "stimulated re-call" techniques can be used with the participants (both lecturers and students) at various stages after the tape has been made. In addition, the creation of a permanent record of the processes allows for the checking of intra- and inter-observer reliability in the use of the interaction analysis instruments, which enables greater reliability and validity of the final results. In the previous chapter the concepts of "action research" and "triangulation" have already been explored, from which this choice of data collection method was derived.

In the following sections, specific data collection and data analysis methods are described which were used in the research, and are included in the appendices.

Information Gathering on Aims and Expectations

In this section reference is made to Appendices One and Two. These two instruments, The Lecturers' Comment Sheet and The Students' Comment Sheet, were expressly given those titles, since they were designed to give participants an opportunity to comment at some length in a relatively unstructured way on various aspects of their experience in small groups. They were not, therefore, questionnaires. A sample of lecturers and students were invited to complete the sheets, which were distributed a few days prior to the video-recording of their class, and to send them back to the researcher within a week after it. Of the seventy-two sheets distributed, to students, fifty were completed and returned, which gave a percentage completion rate of 69.44%. All fifteen lecturers in the selected sample completed and returned their sheets. As can be seen from the various sections, information was supplied on the aims, intentions and expectations the participants had for their classes, as well as expressions of like and dislike of this form of teaching medium. This data is analysed in detail in Chapters Four and Five of the thesis. In addition information was sought about the extent of the intrusion into the class processes by both video equipment and observer. In only one class, a small group of three students and a tutor in a third-year French class, did these appear to be more than a marginal intrusion. In this group two students stated that they were aware at times throughout the seminar of the presence of the camera etc. In the rest, however, by far the majority expressed an awareness of the presence of camera and observer for the first six to eight minutes, but then forgot they were there. Most also commented that the particular class, which was recorded, was a fair representative sample of the kind of small group teaching they normally experienced in that subject.

Data Analysis Instruments on Small Group Practice

Once the data had been collected by the methods outlined previously in this chapter, the analysis instruments had to be selected and applied. It was decided to choose an interaction analysis schedule to examine the relative amounts of lecturer talk and student talk, the nature of that talk and the interaction patterns between the participants. It was at this point, that the realisation dawned about the extent of data that had been collected. In order to allow for a practice phase, which would test both intra- and inter-observer reliability, during the application of the schedule, it was decided to select from the classes recorded a representative sample of twenty classes across the six Faculties. It was felt that this sample would furnish sufficient results to make substantive comments on the learning and teaching processes and these results would be valid because the cross-reliability would

have been rigorously monitored. And so the analysis began with practice sessions using the BIAS instrument (described below and included as Appendix Three) for the researcher and an assistant. Both were checked for intra-observer reliability, and samples of the results of the assistant and the main researcher were compared to assess inter-observer reliability. When both these aspects had been adequately monitored and it was seen that the schedule was being applied consistently, the use of it on the recordings of the twenty sample classes began in earnest.

The specific category system, BIAS (Brown's Interaction Analysis Schedule) was chosen after several such schemes had been considered, including the particular ones already alluded to in Chapter Two (See Amidon and Hunter, 1967, Flanders, 1970 and Heron, 1975). FIAC (Flanders), VICS (Amidon and Hunter) and the even more complex ones they had spawned (for example STOS, Eggleston et al, 1976) were rejected as being oriented too directly to secondary classrooms and as yielding potentially data in areas not specifically to be addressed in this study. Heron's Intervention Category System was considered to be attuned to analysing specific groups in professional settings, where there was a heavy emphasis on the emotional and social dynamics of the group as well as on the interaction patterns and amounts of talk. At this stage in the development of research into small group practices in higher education, concern was more with establishing and identifying what was actually happening, since no work had yet undertaken even that sort of analysis. For the part of this study, which dealt with the analysis of interaction patterns then, a relatively less complex schedule was needed and, if possible, one which had been developed for use with instructional groups in higher education. The most appropriate choice was considered to be BIAS.

It was chosen for three principal reasons:-

1) The seven categories:-

TL - Teacher lectures, explains etc.
TQ - Teacher questions
TR - Teacher responds
SR - Student responds
SV - Student volunteers
S - Silence
X - Unclassifiable

and time interval of three seconds are particularly appropriate to both the data and the intentions of this analysis.

2) It is a relatively uncomplicated system, to which research assistants can be readily trained and with which there is a high degree of comparability between research assistants; thus the results have greater reliability and validity.

3) A computer program had recently been developed by Rogers D.G. and Smith G.M. of the Further Education Research Network (FERN) which used BIAS as its basis. A description of the program's use according to its writer is included as Appendix Four.

The data was input to the 32K PET computer via the Data Input Sheet included as Appendix Five.

This program was of invaluable use in the analysis of the research data. The results gained from the computer analyses formed the basis of Chapters Six and Seven in the writing up of the thesis, which include:

1) an analysis of lecturer talk in small group teaching;
2) an analysis of student talk in small group teaching;
3) a commentary on the interaction patterns.

Samples of the print-outs of results following the analyses of two groups are incorporated into Chapter Six.

The responses on the comments sheets and the findings from the interaction analyses indicated that teacher questioning was an aspect, which invited further consideration. For this a Questioning Analysis Schedule was devised and applied by the researcher, which is attached as Appendix Six.

The Analysis of Questioning

Eight classes were selected for the detailed analysis of all the questions posed by the lecturers with those groups. Each teacher question in those classes was categorised according to the following six definitions:

| | | |
|---|---|---|
| 1. | Administrative: | Questions in the following areas:<br>facilitating processes,<br>starting/finishing,<br>changing topics,<br>bringing in students,<br>discussing administrative details of the course etc. |
| 2. | Information Recall: | Questions requiring the recall of information, previously acquired concepts, facts, terminology etc. |
| 3. | Speculative: | Questions which elicit speculation and prediction, based on known data and information. |

| | | |
|---|---|---|
| 4. | Problem Solving: | Questions prompting the solution of specific set problems. |
| 5. | Analytical/Evaluative: | Questions requiring analysis of an argument, issue, etc or evaluation of a situation, event, issue, etc. |
| 6. | Probe: | Questions to prompt more of a response from students. This might be a repeat question, a reformulation of the original question or a further question as a follow-up in a progression of questions on a specific area. |

The results of the analyses of all the teacher questions across eight classes are written up in Chapter Six.

Surveys on Staff Development and Staff Appraisal

Having derived results using the research instruments described above and presented in Appendices One to Six, the focus of the researcher turned to the practical implementation of recommendations consequent upon those results. To assess the climate and context into which the findings and recommendations were to be received, commentaries on surveys conducted by this researcher at The University of Sheffield were introduced in Chapter Eight. In Appendices Seven to Ten the means are included, by which the two surveys, one on academic staff training and the other on staff appraisal, were conducted. The letter (Appendix Seven) and the CVCP's draft Code of Practice on Academic Staff Training (Appendix Eight - printed with the permission of the Academic Staff Training Co-ordinator, Dr G A Brown) were both mailed to all Deans of Faculties and Academic Heads of Departments within the university, and the report and summary of that exercise and the responses are given in Chapter Eight. Also in that Chapter the data collected from a survey of opinion on staff appraisal, prompted by Appendix Nine (letter from the Staff Appraisal Working Party under the Chairmanship of the Pro-Vice-Chancellor in charge of Staffing Matters) and Appendix Ten (specific questions on aspects of appraisal in universities formulated by this researcher) is added, analysed and summarised.

With the use of all the analysis procedures described in this chapter and the instruments included in the ten Appendices, the results were achieved, which are presented in the following chapters of this thesis. There is a logical progression in the presentation of the

analyses, the findings and the consequent recommendations, which corresponds to the teaching cycle. The examination of aims and expectations comes first, followed by consideration of practice and subsequently of the wider context of that small group practice. The following chapter then is devoted to the detailed analysis of lecturers' aims for and expectations of their small group teaching.

# CHAPTER FOUR

# AIMS AND EXPECTATIONS OF PARTICIPANTS IN INSTRUCTIONAL SMALL GROUPS

## Introduction

> "Our view regards the individual human mind as a vessel of varying capacity into which is to be poured as much as it will hold of the knowledge and experience by which human society lives and moves. This is the *Martha* of education, and we shall have plenty of these tasks to perform. But the *Mary* regards the human mind as a fire that has to be set alight and blown with a divine afflatus. That we also take as our ambition."
>
> (Lord Crowther in Harris and Holmes, 1975).

Two aims of higher education are referred to in the above extract from Lord Crowther's inaugural address for the Open University. Lord Crowther focused here on the importance of kindling the human mind and feeding it with information. Key words in his reference to information transmission are "as much as it (the individual human mind) *will hold*", if the "knowledge and experience" being "poured in" are to be successfully assimilated by the learners. This presupposes a stage in the teaching process which enables learners to indicate to teachers (a) the individual learning context into which information is to be introduced and (b) the extent of knowledge and experience which the mind *will hold* during and after any one learning/teaching opportunity, be it lecture, practical, tutorial or seminar. It may be salutary to ask from time to time whether our university teaching approaches and methodologies incorporate the above aims and opportunities.

Elton (1980) emphasised two further aims, not alluded to directly in Lord Crowther's address: those of learning to learn independently and learning for understanding rather than mere information gathering.

> "The fundamental aim which, in my opinion, we as university teachers have for our students, is that by the time they leave us they should be able to learn on their own, and that they should be able to learn in such a way that they not only know, but understand what they know."

This researcher would argue that all the four above-mentioned aims are best achieved in small group work rather than large group work, ie lectures. Most particularly the aims referred to by Elton imply the necessity of providing small group learning opportunities for students. The very nature of the lecture positively encourages information gathering rather than understanding by students and affords little opportunity for independent learning and taking responsibility for one's own learning development. An effectively organised and presented lecture can act as a stimulus to further learning, as a "divine afflatus" which can

"set alight" the human mind; yet an opportunity to interact in discussion work with tutors and with peers might be an even more potent kindler of that fire. The lecture is also the classic, traditional method, by which knowledge and experience is "poured into" students at university, yet it is very rarely preceded by an opportunity for students to indicate to course providers their learning needs and capacities. More often than not small group work is introduced, if at all, as a follow-up to the lecture in a course timetable, sometimes to provide a remedial opportunity for students, who might not have fully understood the context and application of the preceding lecture material. There is an essential paradox in traditional university teaching, in that most lecturers would agree that students differ in

(a) what and how much they know of a subject;

(b) their interest in and enthusiasm for their subject;

(c) the ways in which they learn new material.

Yet no account is taken of the above in the most common form of teaching; in a lecture they are treated as if they are all exactly alike. A skilled lecturer will try to take account of differences of interests and abilities, but not of detailed individual differences.

When discussing the value of small group work and pointing out some deficiencies in large group teaching, it must be remembered that the latter is a very economical teaching mode and the former is less cost-effective in terms of the input of academic staff time. It follows, therefore, that all those involved in providing small group learning for students should be aware of its relatively high level of cost and should, therefore, ensure that what is being provided, via that method, is worth the level of cost incurred. It is salutary to ask frequently of oneself whether what is being aimed at and what is being done in small groups is *qualitatively different* from that which is carried out in lectures; and whether the extent of the gains for the students of the small group method justify the extra costs incurred. For example, if the content of a tutorial is largely an extension of a previous lecture, when the tutors continue to talk *at* smaller groups of students for the great majority of the hour, then it could be argued that the one lecturer, responsible for the preceding lecture in question might just as well - and indeed more cost-effectively - continue the course in lecture form and free his/her colleagues of the tutorials, in order that they can pursue their research. In short, the aims and content of a teaching session should not only dictate but also justify the means.

This chapter and the subsequent one seek to explore the aims and expectations of two groups of participants in university small group teaching. By analysing in detail several sections of the comment sheets (see the preceding chapter and Appendices One and Two) of participating staff and students, a variety of intentions and attitudes are explored and examined. Before considering the comments of participants, however, a short review of learning theory with specific reference to small group learning is included as a framework for the analysis of those comments.

An Examination of Learning Theories related to Small Group Work

In Chapter Two, "Review of the Literature", extended reference was made to the experimental work in small group teaching carried out by Abercrombie. Her idea of the passive, essentially facilitating, role of the tutor in the development of capacity for sound judgement in medical students can be traced back to a concept in the psychology of learning, developed much earlier by Bartlett (1932). Bartlett wrote of "mental schemata", which he defined as "an active organisation of past reactions or of past experiences, which must always be supposed to be operating in any well-adapted organic response". He suggested that the process of learning involves the assimilation of information entering the mind from outside to schemata already existing in the mind due to previous experiences. The interaction between these two can both alter the incoming data and also change the existing schemata. Just as with Abercrombie's approach to the development of judgement in students so does Bartlett put major emphasis on the significance for learning development of the interplay between the new information and the existing context into which it is introduced. Both these approaches to learning theory and development support the need for the creation within higher education of opportunities for students

1) to identify and indicate to tutors their own individual learning context, ie in Bartlett's terminology, existing mental schemata, and
2) to aid the assimilation process of new knowledge and experience to these schemata by verbal as well as cognitive manipulation of the ideas involved.

Ausubel's (1973) theory of "advance organisers" and their significance for learning development presents us with a similar concept. The purpose of his suggested technique for teachers of including a stage in the process, which he labels "advance organisers" is that they "bridge the gap" between what the learner already knows and what he/she needs to know before successfully learning the new task at hand. Enabling connections to be made in the students mind between new knowledge and/or experience and the existing schemata is seen therefore by Ausubel to be central to the learning process. Moreover, he recommends that such connecting is not successfully enabled by mere summary of what has gone or overview of what is to follow, rather that this "bridging the gap" process should provide opportunities for explanatory and *integrating* connections between previous and new material. This theory again implies that it is highly significant for students and their teachers to operate at regular intervals in situations when verbal interaction can facilitate such "integrating connections". It is precisely by having opportunities to explore, through

talk, one's own existing schemata in relationship to those of one's peers and one's teachers and in relationship also to new information, that "gaps are bridged" and "meaningful learning" takes place.

The phrase "meaningful learning", quoted by Novak (1977) is Ausubel's expression for learning for understanding. Novak represents Ausubel's ideas in the form of a map of learning (Figure 4.1) which depicts two separate dimensions - rote to meaningful learning and reception to discovery learning. The helpfulness of this map to academics in their teaching role is the location of different teaching and learning activities on these two independent dimensions, thus aiding the selection of appropriate strategies for particular tasks.

It is significant for the purposes of this study to note the position of "tutorial instruction" ie the one form of small group work represented on the map.

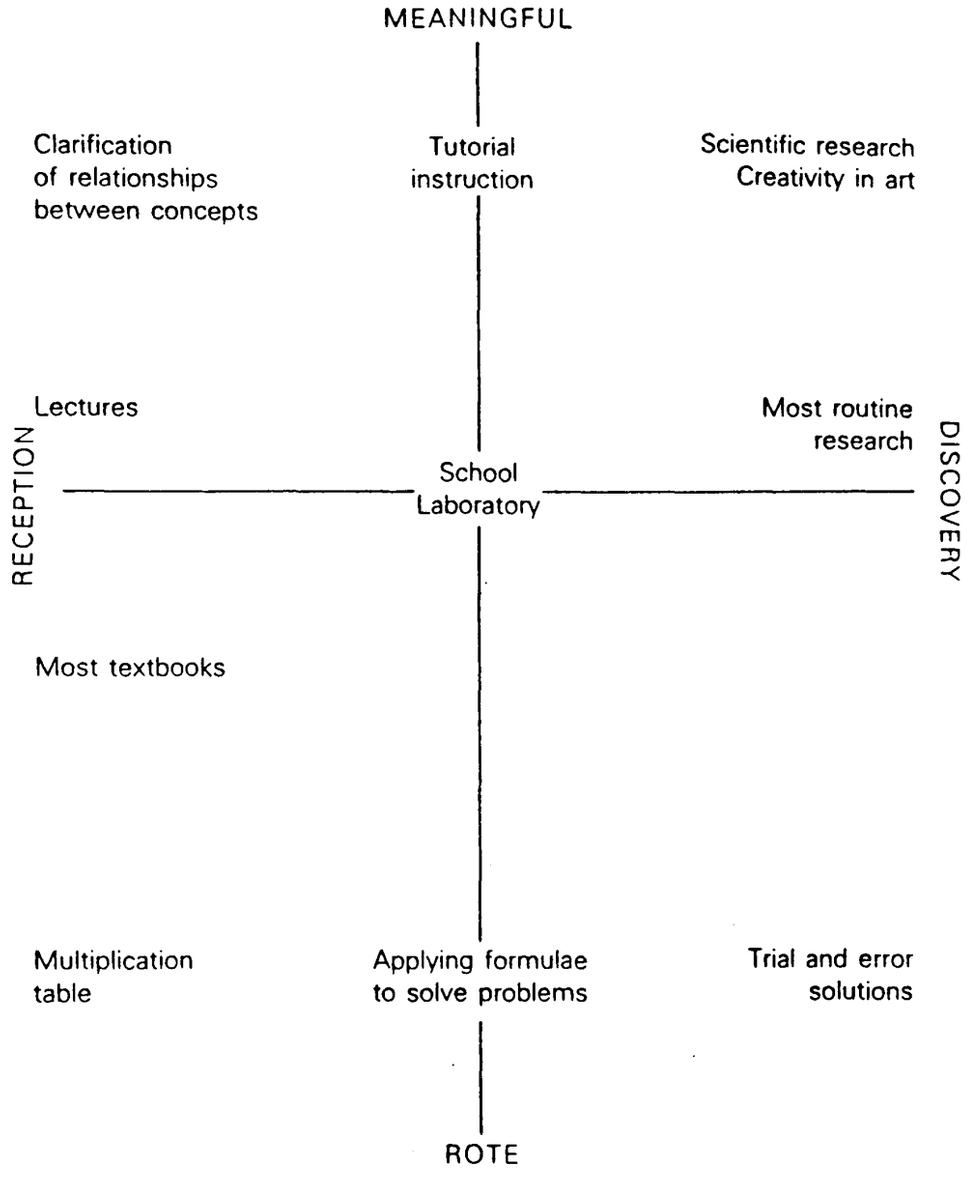
Examples of these Theories translated into Practice

Abercrombie's work with medical students, already described in Chapter Two, furnishes us with one example of the preceding theories in practice. The application of such approaches to learning is not, however, only appropriate to selected disciplines. Black's work (in Ogborn, 1977) with Physics' students demonstrates the success of small group work for training in mental skills. He describes his as "skills sessions", when groups of approximately twenty students were divided into four sub-groups, each working on the same task. They spent a half-hour in sub-groups, before they were brought back to plenary when the four reports would be compared and discussed under the guidance of the tutor. The format of such sessions was, therefore, small group tutor-less discussions of task followed by a tutor-guided larger group discussion.

Thus far the examples have been derived from the Science area. Although there is a tacit assumption that highly factual disciplines have less room in their teaching for participative group work, the above examples indicate techniques, viable in such information dominated areas for enabling students to participate more fully and take greater responsibility for their own learning development. The corollary of the assumption that factual disciplines limit the possibility of participative work is that subjects within the Arts and Social Science areas have more opportunity for small group work. This assumption is examined more closely in the following chapters with particular reference to a wide range of subjects across Arts, Science and Social Science Faculties. There are, nevertheless, parts of Arts subjects, in which the teaching has traditionally been didactic, for example prose and translation work in the study of languages. One aim of the teaching of this subject area must inevitably be the development of communication skills - both written and verbal - in the target language of the students. It is ironic, then, that much of the class teaching of the language area of the subject has customarily in both schools and higher education been highly didactic in

# FIGURE 4.1

**The Map of Learning, after Ausubel (adapted from Novak (1977))**



style. This researcher devised a small group method, which enabled students to participate much more in prose translation classes. A larger group of approximately fifteen students were each asked to prepare an individual version of a piece of German translation from an English passage. When they came to class they were divided into three smaller groups, each with a chairman (different each week), whose task it was to write down the consensus version produced by the group in forty minutes of a seventy-five minute class. During this period when the individual versions were being compared and discussed and a consensus version being developed, the teacher was permitted to act only as a dictionary or grammar reference, ie the groups could only consult her as they might those two texts. She was also listening and noting from the group work, areas of confusion or difficulty which emerged. The three chairmen would then present verbally sections of their group's prose for comment by the other groups and the teacher. In this way what is often a highly teacher-centred and corrective exercise, when teacher listens to individual's attempt at a sentence, corrects it and moves on to next sentence for correction, is transformed into an activity, which focuses on process and practice rather than result and testing. The students are encouraged to participate and to contribute and have opportunities of exchanging alternatives and testing out ideas, before the final collaborative version comes to the scrutiny of the teacher.

A further very significant point is to be made about the above three approaches to enabling the learning of students. What they have in common is that they detract from the idea, so often inculcated in teaching at secondary level, that education is about learning what is right and what is wrong and that "shades of grey" do not exist. The above techniques of small group work face students with the realisation that different learners and perhaps different teachers may tackle the same task from different premises and with quite different methods. Indeed the results might also be different, yet not necessarily amounting to one being right and one wrong.

Also in the above examples of working with small groups of students it is clear that the lecturers involved had as a prominent aim that the students participate in the task and interact with each other. The expectations of the lecturers were, it would seem, that such methods and such consequent interaction would be successful in the development of the students' learning. We now turn to examining the aims and expectations of a group of lecturers who took part in this small group teaching research project.

## Aims and Expectations of Participating Lecturers

### Details of the Sample

Of the thirty groups video-recorded for analysis, a sample of fifteen were selected according to the variables described below, for a detailed analysis of the aims and expectations of the participants. All of the fifteen lecturers were asked to complete the comment sheet

referred to in Chapter Three and included as Appendix One. Within the fifteen groups a random sample of students were invited to complete their comment sheet. The profile of the lecturers in the sample is given in the following Table 4.1.

The variables isolated in the selection of the lecturers for the sample were as follows:

Subject area.

Age.

Status.

Experience.

Sex.

Subject Area

It was thought that this might have a bearing on the aims and expectations of the lecturers for their small group work. In analysing the comments of lecturers the assumptions depicted in the following Figure 4.2 were explored and tested, in order to see whether our sample indicated their validity or not.

The figure depicts four spectra along which subject areas might be located according to the predominant teaching styles employed. The assumptions are therefore that in highly factual, information giving areas, there exists an expectation of a greater degree of teacher-centred, leader-structured and expository teaching, characterised by an authoritarian approach to the transmitting of the material and possibly towards the students themselves. These four spectra are located within a framework of perceptions of the subject, to indicate that they are assumptions or perhaps even expectations in the minds of either students, teaching staff or both. The lecturers' and students' responses to sections of the comment sheets provides data, which enables the analysis of such perceptions and assumptions.

The lecturers were selected then to give a sample from a variety of five broad areas:

| | | | |
|---|---|---|---|
| 1) | Arts | : | French; History. |
| 2) | Educational Studies | : | Teaching of Russian; Theory of Education. |
| 3) | Engineering Science | : | Mechanical; Production; and a class combining Sociology and Engineering.* |
| 4) | Medicine | : | Human Morphology; Pharmacology; Physiology. |
| 5) | Social Sciences | : | Industrial Economics; Social Administration. |

*This class, for which two lecturers' comment sheets are analysed, was led by two lecturers simultaneously and was from a course entitled "The Young Engineer in Society". The course was developed by the two lecturers, one an engineer, the other a social scientist and intended for students from all engineering areas.

## Profile of Lecturers in the Sample

| | Subject Area of Lecturer | Details of Lecturer | | |
|---|---|---|---|---|
| Lecturer | (Alphabetic Order) | Age | Status | Sex |
| L.1 | Education - Teaching of Russian | 41 yrs | Lecturer | M |
| L.2 | Education - Theory of Education | 46 yrs | Senior Lecturer | M |
| L.3 | Engineering - "Young Engineers in Society" | Not given | Senior Lecturer | M |
| L.4 | Engineering - "Young Engineers in Society" | Not given | Senior Lecturer | F |
| L.5 | French - Literature | 29 yrs | Lecturer | F |
| L.6 | French - Philosophy | 43 yrs | Professor | M |
| L.7 | History - Medieval Texts | 46 yrs | Senior Lecturer | M |
| L.8 | History - Medieval Texts | 46 yrs | Senior Lecturer | M |
| L.9 | Human Morphology | 49 yrs | Senior Lecturer | M |
| L.10 | Industrial Economics | 26 yrs | Lecturer | M |
| L.11 | Mechanical Engineering | 30 yrs | Lecturer | M |
| L.12 | Pharmacology | 43 yrs | Senior Lecurer | M |
| L.13 | Physiology | 32 yrs | Lecturer | M |
| L.14 | Production Engineering and Management | 36 yrs | Lecturer | M |
| L.15 | Social Administration - Statistics | 31 yrs | Lecturer | F |

TABLE 4.1

Subject Areas & their Influence on Small Group Teaching Styles

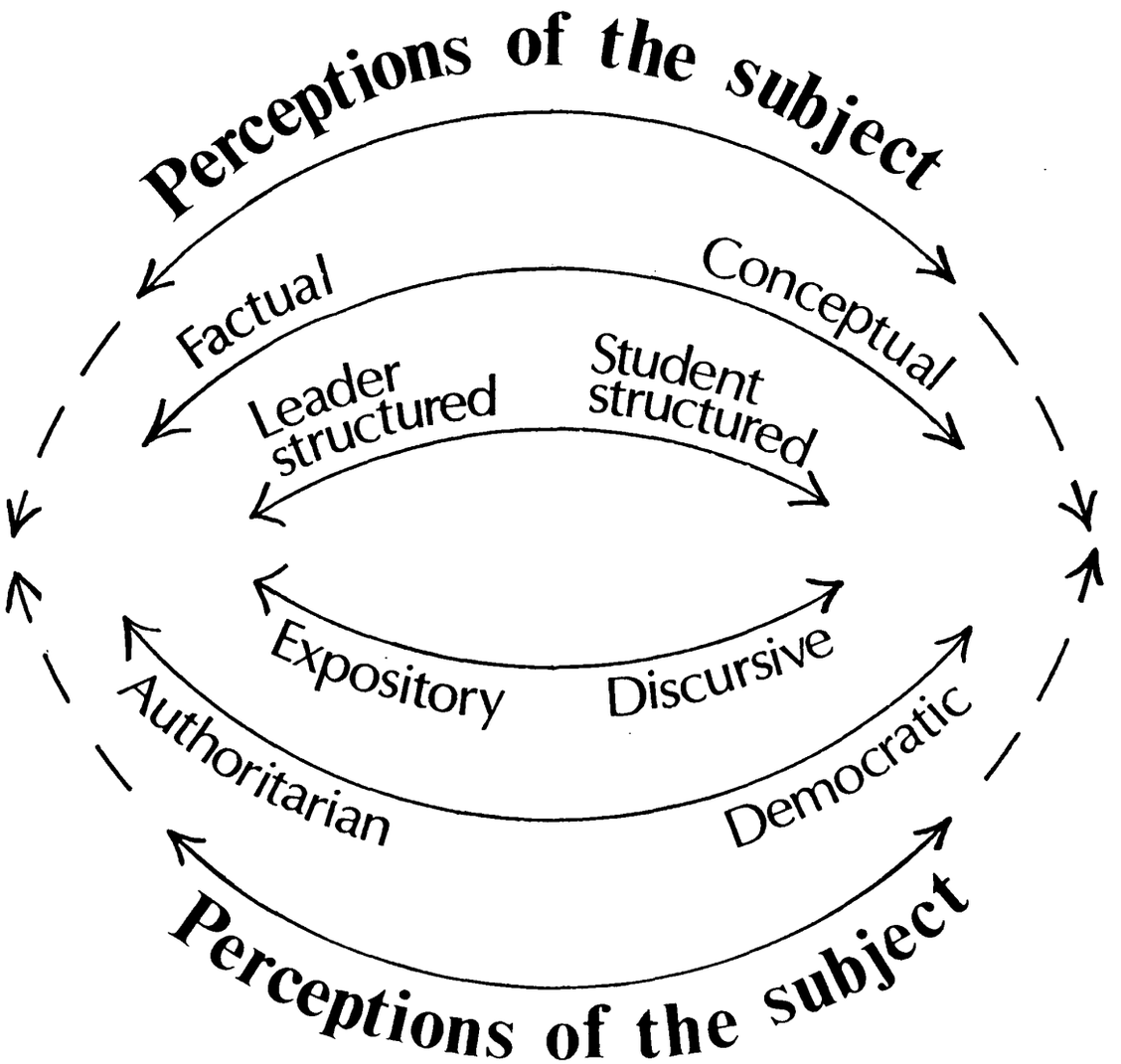



FIGURE 4.2

In addition, within one subject area ie French, two lecturers from two different sub-areas of the discipline were chosen - literature and philosophy. In the area of history the same group were sampled for two meetings to examine whether the participants' aims and expectations differed from one meeting to the next.

Age, Status, Experience and Sex

Prior to the collection of the data via the comment sheets, it was supposed that these four variables might have some significance in relationship to the attitudes of the teachers to their small group work. A detailed analysis of the responses to sections 1, 2, 7a and 7b of the comment sheets will now furnish us with information as to the correctness or not of that supposition. The sections read as follows:

| | |
|---|---|
| Section 1 | **Please outline what you hope this particular class will achieve.** |
| Section 2 | **In what ways is teaching in a small group likely to help you achieve the above things.** |
| Section 7a | **What I enjoy most about small group teaching is ....** |
| Section 7b | **What I find most difficult about small group teaching is ....** |

Lecturers' Responses in Section One

**Please outline what you hope this particular class will achieve.**

The phraseology of the brief given to the sample of lecturers in this section was deliberately chosen to avoid asking what the lecturer expected he/she might achieve, or what the students might achieve. The more neutral expression , "this particular class will achieve" was selected in order that the responses given might indicate how each particular lecturer perceived the purposes of this small group meeting - whether in terms of

(a) what he/she might achieve with the students, or

(b) what they might all share in achieving, or

(c) what the students themselves might achieve.

Whichever interpretation of purposes was indicated by the lecturer's responses in each case might lead us to identify the degree of teacher-centredness or student-centredness of the class.

It is clear from the analysis of responses in this very first section that there was little identifiable correlation with any of the variables isolated and outlined in the previous section.

Five Groups with Teacher-Focused Aims

Of the sample of 15 classes, the responses received from 5 of them were totally lecturer-focused, ie every aim outlined for these 5 classes identified what the *lecturer* would achieve. These 5 classes were within three Faculties; those of Applied Science, Medicine and Social Science; the ages of the lecturers varied across a range from 26 years to 49 years; the teachers of these 5 groups were either lecturer or senior lecturer and included one female teacher.

It is both useful and interesting to note the language of the stated aims within these 5 groups. Their expression of what they hoped the class would achieve indicates very clearly that they intended to be the active participants in, indeed very much *leaders* of the groups they were teaching. There is some coincidence of aims across the 5 groups. The aims range from the introduction of ideas, the identification of problems, the clarification of concepts, and the emphasis of key points, through to the checking of understanding and the assessment of performance. In all the 5 cases of statement of intentions, it is the lecturer who is to be active in carrying out the identified tasks. Clarification is the most common intention alluded to by these 5 lecturers. For example in one of the Social Science groups (Industrial Economics) the lecturer stated:

> "To *clarify* the underlying concepts outlined in the lectures."

And again in one group within the area of Medicine (Human Morphology) the lecturer expressed his three intentions thus:

> "(a) The *clarification* of different factors in aging
> (b) The removal of prejudices
> (c) To *clarify* my own thoughts (added afterwards)."

It is apparent from comments such as those above that they see one of the specific functions of the small group as an opportunity for clarification, which is not afforded by the lecture.

The implication in statements such as the following, the first from a Mechanical Engineering group and the second from the Industrial Economics group - is that this method is a vehicle for the lecturer to ascertain what difficulties a student might be having.

> 1) "To *identify* individual problems."
>
> 2) "To *sort out* any problems regarding certain accounting exercises."

This identification exercise alluded to here is part of the clarification task expressed by the former lecturers, and both are enabled by the small group, in which it is presumably assumed that students will have an opportunity to express their confusions and their difficulties in order that they can be *identified* and *clarified*.

A further intention, expressed by two of the lecturers, is that of emphasising. They both indicated that the small group is a forum which allows them to impress particular points on students - one is concerned with the subject area content, the other with study behaviour -

> "To *stamp in* technique and rationale for technique in describing the relationship in two dimensional tables."

> "To *emphasise* the importance of certain activities, in particular personal study."

Each of the above three aims of problem identification, clarification and emphasising were alluded to by more than one of the lecturers. Two further intentions were stated for these 5 groups, each one expressed only once for one particular group. Only once was the intention expressed of *introducing* ideas. This was with reference to a Statistics class in Social Administration. Finally one lecturer's stated aims were totally concerned with evaluation and assessment. This came up also as an intention in connection with some of the other 10 groups in the sample. The Engineering lecturer in this case was intending to assess both the students' work and the value of the class and stated his aims thus:

> "To *evaluate* the students' own efforts at preparing role specifications.
>
> To *assess* the value of role specifications on Organization Design."

<u>One Group with Student-Focused Aims</u>

In marked contrast to the aims for the 5 groups analysed above, there was 1 group only out of the total 15, for which the intentions were expressed by the lecturer entirely in terms of the students' achievements. This class was in a different area of Medicine - Physiology, and the lecturer concerned stated the aims of the class as follows:

> "By going some way towards solving problems based on medical case histories, the students will (a) gain perspective on the use of drugs (learnt about theoretically) in real situations, (b) specify particular areas of difficulty in treating simultaneously with more than one drug, (c) establish criteria which can be used to decide when treatment is essential, inessential and undesirable."

This statement of aims is different from all the rest expressed by the lecturers involved with the other 14 groups in the sample. It is the only example of a small group class being

conceived of by the lecturer, in this case a 32 year old male, as a session in which the students are central, are active and are the ones who are described as achieving the tasks set. There is no specific mention of lecturer input, except incidentally, since he was presumably responsible for the provision of the "medical case histories" referred to. The intention is clearly enunciated that it will be the students who will be responsible for and who will contribute towards each other's gaining of perspective, specifying of particular difficulties and establishing of criteria all with reference to the drug treatments being examined in the case studies. It is significant to note that the style of language and choice of vocabulary of this lecturer is unique within the sample. There is no mention of introducing, clarifying, assessing, leading, identifying, etc. as with the words chosen by the other lecturers to describe their intentions; rather the intended thought processes of the students are the focal point of this class's aims, ie the students' gain in perspective by analysing and discussing the case histories and their own establishing of criteria in the course of these discussions.

Nine Groups with both Teacher-Focused and Student-Focused Aims

The responses from the lecturers within the 9 groups, in which the expressed aims were both teacher-focused and student-focused, spanned the faculty areas of Arts, Education, Engineering, and Medicine. These lecturers ranged in age between 29 years and 46 years, in status from lecturer to professor and included both sexes. The most common role, which was identified by 6 of the lecturers, in this group was that of facilitating the students' learning. Facilitation here is used in a broad sense, but under this umbrella term a spectrum of aims were alluded to from the authoritarian idea of *making* the students think about certain issues, *leading* them to ask specific questions through to *encouraging*, *enabling* and *responding*. With reference to one class in Education the lecturer wrote:

> "To *make* the students think about the problem; to *make* them realise their own ignorance."

With reference to a class in French Studies the intentions expressed were:

> "To *lead* the class to ask themselves the questions, to look for the answers in the test, to think critically about proposed answers."

In both the above outlines of intended achievement, the lecturers are assuming a distinctly authoritarian, leadership role within the group. Yet within the latter statement is embodied also the idea of the students being enabled within the group to search for answers and to think about alternative propositions in their search. The students are being *led* into a more independent, questioning approach to their task. The lecturer who wrote down the former aim quoted above, wrote also in his list of aims:

"To *encourage* them to provide creative ideas on the subject."

Here again he is the facilitator, but is aiming at increasing their creativity and at encouraging expression of their own ideas.
Other lecturers within this group wrote also of their aim of enabling and encouraging and of the importance of giving feedback. One lecturer in Engineering expressed his primary aim as follows:

"To *enable* students to analyse the case study and to explore its concepts."

The idea that students need input from their teacher in the form of knowledge and information via explanation occurs also, but only infrequently in the expressed aims of those nine lecturers. The teacher of both the History classes in the sample writes on each of the two occasions that the group was recorded of his aim of transmitting information to the group thus:

"To allow me to explain the historical context of the work."

"To allow me to relate this text to the whole problems of thirteenth century heresy, which these students are studying."

Of the same two seminars this lecturer also wrote each time as follows, of the participation of students in the shared tasks:

"to translate together a chapter of Gregory a Tours: 'History of the Franks' from the Latin."

"discussion of part of a thirteenth century treatise on heresy."

This senior lecturer indicates then within his aims for the two classes sampled, that the purposes of his small group teaching are both the transmitting of information and ideas by him to the students and the creating of opportunities for discussion by all participants of those ideas and information.
A further aim given by two of the nine lecturers in this group of the sample refers to assessment. In one case the senior lecturer concerned expressed the view that a small group session furnished him with an effective opportunity for diagnostic testing.

"I hope to be able to check how well the students can understand the text with the aid of a dictionary, and whether their unseen reading speed is increasing."

The other senior lecturer who referred to assessment in his statement of aims alluded to the group meeting as a part, albeit little, of the formal assessment process.

> "low-level formal assessment"

This class was one in which students were presenting results to the rest of the group. It was their presentation skills as much as the results themselves which were being assessed. It is this focus within this particular group - a first-year presentation class with medical students and a male senior lecturer - on the development of professional skills in addition to medical knowledge and practice, which singles the group out from any other in the sample of fifteen. Although it falls within the nine partially teacher-focused groups, because of the role of lecturer as assessor, the other three aims given by the teacher are student-centred, and emphasise aspects of learning and teaching barely mentioned by any other lecturers. The following are his stated aims in total:

> "Sharing of information between groups with differing experiences in the same topic.
>
> Collaborative resolution of contradictions and information gaps after laboratory experience.
>
> Practice of and feedback on oral communication
>
> Low-level formal assessment."

It can be clearly seen from the above statement that this lecturer's intentions are highly student-focused, apart from the inclusion of his role as assessor. The other three areas are concerned with student activities in the learning process - "sharing", "collaborating", and "practice" not only of medically-related skills, but also of professional skills eg presentation and communication. He is the only lecturer within the sample who expresses concern to develop those additional skills, crucial to the subsequent vocational performance of the students when qualified. He also makes explicit the value he places on the opportunity, created more readily by the small group method, to respond to students and give feedback on their ideas and their communication of them. This emphasis, in his identification of aims, on the students and their intended gains allies him more closely with the lecturer in Physiology, whose group aims were described and analysed in the previous section "One Group with Student-Focused Aims".

Other lecturers in this group of nine did include alongside their intentions of "leading", "encouraging", "enabling", clarifying", "explaining" etc. some aims also for their students, but these were always expressed *after* statements referring to themselves and their intended activities and were fewer in every case than those. For example, one lecturer in French

gave three aims for the class, the first two of which related to her intended activities and the last - a general observation - to an aim for the students.

> "In a general way, all tutorials, whatever the text, aim to increase their (the students,) independent power of literary analysis."

Another lecturer from Production Engineering and Management adds to the end of his list of aims

> "a good *group feeling*"

The implication of this seems to be the creation of a comfortable atmosphere, within which the students will feel more enabled to participate in their own learning development. The aim would therefore be oriented to the students' development.
The four preceding sections:

> "Lecturers' Responses in Section One"
> "Five Groups with Teacher-Focused Aims"
> "One Group with Student-Focused Aims"
> "Nine Groups with both Teacher-Focused and Student-Focused Aims"

have consisted of a detailed qualitative analysis of statements of intention for the fifteen groups in the sample. A summary of this analysis will be given in the concluding section of this chapter. Before that, however, details given by lecturers in their response to the other three relevant sections on the comment sheets will be examined and considered.

Lecturers' Responses in Section Two

**In what ways is teaching in a small group likely to help you achieve the above things**

The reason for including this section on the Comment Sheet for Lecturers was to identify

(a) what lecturers saw as the intrinsic differences between operating with a small number of students and other methods of teaching, and

(b) how these perceived differences related to the specific aims they had set out in the first section of the sheet.

Previously in this chapter attention has been drawn both to the high cost in time - and therefore money - of provision of small group learning opportunities; and to the consequent necessity of clarity of aims and content, which justify such relatively expensive means. The aims themselves have been considered in the previous section, now the lecturers' views of the particular contribution of the small group method are to be examined.

The analyses of responses in this section indicate that there are thought by this sample of lectures to be eight ways in which working in a small group would help them to achieve their stated aims.

1) Possibility of Greater Vigilance of Students

There were several references in the responses of the sample to varying aspects of vigilance. One lecturer wrote of the "students with problems" in his class in Industrial Economics as being "less able to *hide* behind the rest". The lecturer in History, of whose teaching two classes were analysed and who consequently completed two sheets, wrote both times of the importance of small group work for checking the students understanding.

> "you can ensure that the text has actually been understood.
>
> They *have* to translate substantial extracts and can't rely on other students to do the major part of the work. It is also easier to check whether they understand the meaning of the text in historical terms."

This lecturer also referred to the possibility of 'close supervision' afforded by small group teaching. In addition one of the lecturers in Education wrote of the "possibility of pinning down all individuals".

All these comments concerning pinning down students, now allowing them to hide out, checking their understanding and supervising them closely indicate that for one group of lecturers a significant feature of small group contact time is that they can keep a watchful eye on their students' performance in order to check understanding, progress and possibly check also the tendency, implied by the lecturers, for some students to escape their attention. Whether these are desirable teaching characteristics or not is not here the issue, but it is interesting to note that in comments on four out of the fifteen classes referred to, this point of vigilance was of significance to the lecturer.

2) Permits Close Study of Content

In the Arts subjects sampled - in both of the French classes and in the History group the lecturers referred to the importance of small group work for analysing closely the content of the course ie the
texts being studied. Comments such as

> "I can direct my remarks to bits of the text they can refer to ...." and
>
> "One can achieve close study of the text ..."

were made in each case by the three Arts subject lecturers included in the sample, which indicates the particular significance for them in small group teaching of the opportunity for close, detailed study of the content of literary works.

3) Opportunity to Concentrate on Individual's Difficulties

The lecturers in (1) above referred indirectly to this aspect of small groups, when they mentioned the possibility of checking understanding, which implied the pin-pointing of difficulties as and when they arise. Additionally three lecturers in the sample made more explicit reference to this opportunity to help individuals with problems. With reference to one of the History classes,the lecturer wrote:

> "In a small group the problems found in the text by individual students can be considered in detail."

In the Industrial Economics class, the lecturer stated that he could "identify individuals' problem areas more easily". The lecturer in the Mechanical Engineering group in the sample alluded to other areas of student difficulty, not just with the subject, when he stated:

> "A tutorial is normally the main outlet for student problems of all natures. In tutorials the teaching aspects are not primary in my Department."

It is in the above comment that we have the only occasion within the sample, of a reference to a pastoral role for the lecturer/tutor.

In all the above points concerning identification of difficulties and problems of individual students, the emphasis is on the role of the lecturer as "corrector" or as "adviser", predominantly in an academic sense, but once in a pastoral capacity. The lecturers here perceive themselves as being both "in authority" and "an authority" as Peters (1973) wrote.

4) Informal Atmosphere encourages Student Contributions

Six references were made amongst the comments given in this section of the sheet to the importance of informality for enabling student contributions. These comments came from the following range of subject areas: Education, French Studies, Medicine and Social Administration. One of the lecturers in Education referred to this aspect twice:

> "Informality may lead to students contributing more freely. Opportunity for questions from the floor much greater."

Similarly the senior member of the French Studies Department made two allusions in his comments:

> "Only a small group permits the ready asking of questions.
>
> The informality enables any questions to be pursued without pre-programming."

Other lecturers in Medicine and Social Administration underlined the importance of an informal atmosphere for the advancement of their stated aims. One of them went further than simply stating "informality" by defining that as "an atmosphere casual and friendly enough to encourage questions."

It is clear from the emphasis in the above quotations that the creation of an encouraging atmosphere described by several of the sample lecturers as "informal" is felt to be a significant feature of instructional small groups, for achieving the intended aims.

5) Possibility of Discussion/Interaction

This might be construed as an extension of the previous paragraph but is treated separately, since student contributions might mean individual student comments made sporadically and directed largely to the lecturer. However, the specific mention by some of the lecturers of discussion and/or interaction suggests an interchange of comments and ideas by several members of a group. In this context the senior lecturer in History raised the issue of dominance in groups, when he wrote that an aspect of small groups which he valued was the limited scope for domination by vociferous individuals.

> "In a larger group there is a danger that discussion would be dominated by the most forceful personalities. It is seldom those students who need most help."

This interest in the dynamic of groups and the facilitating of discussion is echoed by other colleagues. The senior lecturer in Production Engineering referred to the value of "interaction between students and between the students and the two staff members present". In addition the senior lecturer in Physiology stressed the importance of the "interactive" nature of the class. These three lecturers, therefore, placed emphasis on the value of providing a teaching opportunity, which encourages the interchange of ideas not only between lecturer and student, but between students themselves, and this leads us on to the next section.

6) Communication, Participation and Collaboration

> "I can get a sense that we are looking at the book together, finding references together etc. Therefore that joint discussion, that joint thinking and real communication is worthwhile and leads to discoveries for us all (for me too). The level of discussion is often high and their contributions are certainly as valuable as mine, frequently more so, which I try to let them sense."

In the above quotation a level of aim, expectation and value is expressed which goes beyond encouraging student contributions or even the interchange of ideas, which is why it has been included as a separate section. This lecturer in French Literature described here a

truly collaborative approach to literary analysis and appreciation, and valued highly something which she called "real communication". The implication by the use of the word "real" is that communication on this level is rare, but extremely worthwhile. Her enthusiasm for the process is apparent in her expression of it and particularly of her own gains. The quotation is striking and unique in the sample in its emphasis on shared learning and her willingness to concede "authority" and become a partner in the learning process. It may be that this approach is more possible and likely in an interpretive area such as literature, but there is another indication within the sample, from a more traditionally didactic subject area which puts emphasis and value on the concession of authority to the students. The senior lecturer in Pharmacology and Physiology wrote of the value of the class lying in the fact that it was "student-led."

This issue of the concession of authority and the creating of a collaborative approach to study is reminiscent of Stenhouse's (1972) argument.

> "the teacher will be most effective if he defines his role and thereby makes his use of authority also rule-governed, and his areas of initiative clear. Small group work is not forwarded by the renunciation of authority, but by its definition."

The two lecturers above were not renouncing authority, rather opting to *share* it temporarily in the best interest of the learning development of their students.

7) Insight into Individual Learning Context of Students

and

8) Development of Judgement

These two areas of comment are grouped together, since they were each mentioned only once and by the same lecturer. Yet they are both of sufficient interest and significance to be worth noting. The lecturer in Physiology, who was singled out in the previous section as the only one who stated the aim of his class in totally student-centred language, also described his expectations of the benefits of small group teaching in a unique way within the sample. His response is quoted in full below:

> "I must know the preconceptions of the individuals.
>
> The material is difficult, precluding didactic treatment.
>
> There are few right answers and the development of judgement, ordering of priorities, and awareness of the consequences (and their early appraisal) of the wrong decision are the skills which must *begin* to develop here.
>
> All the objectives require *active* student participation therefore didactic teaching would be useless."

From his references to the inappropriateness for this topic of *didactic* teaching and his emphasis on the students being active, it is clear that this lecturer uses the small group teaching medium to enable students to contribute to and participate in their own learning development. In this, his responses have something in common with those lecturers cited in sections (4), (5) and (6) above - he clearly aims at student contribution, discussion, interchange of ideas and collaboration. Beyond this, two parts of his statement in this section remind us of Abercrombie's writings on her work with medical students, which she called "The Anatomy of Judgement" and in which she put emphasis on the importance of the lecturer having a knowledge of the students' learning contexts (their "existing schemata" in Bartlett's terms) and on the significance for students of medicine of developing a capacity for sound judgement.

It was of great interest to the researcher of this project that this lecturer in Physiology's stated aims in Section One of the Comment Sheet were identifiably student-centred and that his responses so recalled the work of Abercrombie. It was subsequently confirmed that he had considerable knowledge of Abercrombie's work. It may be of note that this lecturer had a particular interest in educational theory and practice and had studied that field in depth.

In this section the responses of lecturers in the sample concerning their expectations of how the small group might contribute to their achievement of aims, have been critically analysed and eight areas of contribution defined. Three of these range on a spectrum of student activity in their learning, from student contribution through to genuine collaboration with their lecturer in learning. Two have a bearing on the learning process itself, reminding us of the learning theories of both Bartlett and Abercrombie, as discussed in the opening stages of this chapter. Two further areas of response refer to the opportunity of paying particular attention to students, checking their understanding and addressing their difficulties individually. Finally one area, with particular reference to Arts subjects, alluded to content coverage and the possibility created by the small group of analysing texts in detail. In the following section it is intended to examine briefly the likes and dislikes lecturers expressed of small group teaching.

Lecturers'Responses in Sections Seven(a) and Seven(b)

**7(a) what I enjoy most about small group teaching is ..**

**7(b) what I find most difficult about small group teaching is ..**

The responses within these two sections provide some interesting complementary and contradictory comments concerning the lecturers' attitudes to small group teaching. The area most commonly referred to in the sample in both the enjoyment and dislike sections

centred around the opportunity created by this medium for interaction and participation. This was variously cited by seven of the lecturers as an enjoyable aspect of their work, and they particularly frequently commented that they liked the possibility of "getting to know students better as people" or of "enjoyable social occasions when I know them (the students) quite well."

Yet with similar frequency, nine of the sample stated that specific issues arising out of this very process of participation presented them with their difficulties. One lecturer wrote of the "considerable skill involved in directing the discussion on fruitful lines", another of problems with "shutting up the vociferous and bringing in the meek". Other lecturers mentioned difficulties with "sparking the students off" and it being "disastrous if there are personality clashes." It is evident, therefore that participatory learning presents lecturers with both very taxing and yet rewarding work. One senior lecturer wrote of his dislikes with touching honesty

> "To be frank - keeping on your toes all the time! Perhaps I am getting old - but it is tiring"

Amongst the enjoyment expressed a very common feature, referred to by five of the sample was the opportunity created of feedback in both directions - by students to staff and by staff to students. Comments such as the following were made by all five:

> "- sharp feedback from members of a small group - which is almost completely absent when I am lecturing ..."

> "being able to give praise."

In this section one other lecturer also alluded to the enjoyment he gained in "better personal contact with the students" because it enabled him "to judge the capacity of the individual students more closely and to gear teaching to their needs". He is suggesting here that small group work affords an opportunity to gauge more closely the learning levels of students and is suggesting also that this teaching method is sufficiently flexible to be adapted, in order that those identified individual learning needs can be met.

Hitherto in the analysis of responses a noteworthy feature has been that little correlation exists between the expressed aims and expectations of the lecturers and any of the variables originally isolated ie subject area, age, status, experience and sex. Comment from one lecturer on a Statistics class within Social Administration gives us an interesting insight into the possible influence of subject matter on teaching process. She stated clearly in her details concerning both enjoyment and dislike of small group work, that her experiences generally with seminars were positive, but that this subject area ie Statistics, was not as enjoyable.

(7a) "I have had some very enjoyable experiences of feelings and mutual insight and discovery in small seminar classes - *not* first year Statistics."

(7b) "It depends very much on the group and subject. In some subject areas eg Statistics, which are to me at least intrinsically less exciting that others - I find it very difficult to sustain my own interest after having mastered the problem myself year in year out, to create the kind of opportunities for students which small group teaching provides."

The above comments suggest three thoughts:

1) Subject area can have effect on teaching approach, not in the sense outlined previously of a university discipline, rather specific subject matter within a discipline which might be "intrinsically less exciting" than other aspects of the broad subject area. In this case Statistics proved dull for the lecturer in comparison with more "exciting" parts of the course.

2) The lecturer's own enthusiasm for the subject can influence the teaching style.

3) The lecturer's performance in small groups can vary according to the subject matter of the class.

Whereas there was no close relationship between academic discipline and expressed aims of lecturers, it is nonetheless important to note that within the discipline a lecturer's attitude and therefore perhaps style and approach can change according to the specific subject matter being addressed.

Finally, in this section there were significant comments which would "blow the myth" of the rigid identification of teaching style with academic subject area. There are in existence perceptions of subjects and the nature of teaching within them, which were depicted previously in Figure 4.2 in this chapter. There is a prevalent belief that, for example, lecturers in the areas of Applied Science and Medicine have, in general, a more didactic approach to teaching than those, for example, in the Arts and Social Sciences. According to this sample and data the above perception is not valid in relationship to small group teaching. A close examination of the comments made in the likes and dislikes sections of the Comments Sheets of the three medical lecturers serve as a useful and even amusing illustration of the falseness of assumptions frequently made about teaching and learning in Medicine. On the one hand, one of the senior lecturers, from the area of Human Morphology described his *likes* as follows:

> "Talking.
> Contradicting superficial ideas."

In addition his expressed dislike with small group work was 'a problem in getting students to participate'. It is not difficult to anticipate his dislike and problem, when one has read and interpreted his enjoyment. Implicit in that statement are

1) an expectation that students have superficial ideas. (They may indeed have, but it is not productive to approach the teaching with that expectation).

2) an interpretation of the role of lecturer as a confrontational one, in which he corrects and 'contradicts'.

3) an assumption that the lecturer dominates by 'talking' and 'contradicting' and that the students are passive recipients of these actions.

The stark contrast between the comments of the other two medical lecturers in Pharmacology and Physiology. They wrote as follows:

"hearing the spontaneous insights of good students
being able to praise
grasping directly any difficulties they are having"

and

"There is a contract between the group and myself, and therefore their attainment is not constrained by pressures of curriculum, difficulties associated with large group inflexibility and above all with the positive lethargy encouraged by a mass lecture environment."

The emphasis here on listening and responding in the first extract and on a contract between students and lecturer in the second, which permits flexibility and active participation by all, speaks for itself, when juxtaposed with the interpretation of the other lecturer in Human Morphology's attitude and approach. An interesting footnote to the above radical contrast is that the two lecturers within Pharmacology and Physiology collaborated frequently in their course design and planning of teaching methodologies, and both were well-versed and interested in the teaching of Medicine, as well as its practice and their research.

The above analysis of contrasting comments in the area of Medicine indicates that there can indeed be no generalisations concerning styles of and attitudes to small group teaching within academic disciplines. It would be difficult to find a greater difference in approach, even if the whole spectrum of disciplines with a university was reviewed.

Summary of the Analysis of Lecturers' Comments

The following points represent the results of the qualitative analysis of fifteen lecturers' statements in Sections 1, 2 7(a) and 7(b) of the Comment Sheet.

[1] **The majority of lecturers state their aims according to their intended activity and achievement in the class.** Five of the fifteen wrote only of *their own* intentions, a further eight wrote of *their* intentions firstly, and secondly referred to intended student achievements. One gave three student-centred aims and one aim which related to his activity. Finally one lecturer wrote totally of student gains and student activity.

[2] **Very few lecturers, therefore, perceive of the students as being the most active participants or of the need for them to develop responsibility for their own learning.**

[3] **The language of the stated aims indicates a recognition of the particular purposes and functions of small group work.** There were only few references to input of information and ideas. The majority wrote of using the medium for "clarifying", "identifying individual difficulties", "emphasising special points", "assessing understanding", and "enabling" and "encouraging" students in their learning.

[4] **The responses in Section 2 underlined the above recognition of the special nature of this teaching medium.** Three of the aspects alluded to, involved reference to the possibility of student contributions, interaction between members of the group and collaboration in the learning process.

[5] **Several lecturers indicated by comments in both Sections 1 and 2 that they have a pre-occupation with vigilance** and close supervision of students' learning and progress, which is particularly enabled in small group work.

[6] **Very few, however, (only two) indicated an awareness of the opportunity provided by small group learning of the lecturer gauging the individual learning contexts of the students; a valuable aspect, which learning theorists have stressed.**

[7] **There is no correlation in the sample between the variables age, status, experience and sex - and the aims and expectations of lecturers.**

[8] **Subject area provided one significant correlation.** All three lecturers from the 'Arts' indicated the special purpose of small group work for close detailed study of content ie texts and literary analysis.

[9] **One other lecturer revealed in detail a further influence of subject matter ie topics within an academic discipline.** The enthusiasm for and interest in a particular topic can influence attitude and therefore style of the lecturer with his/her group.

[10] **The whole area of 'student participation' causes contradictory responses from lecturers.** Sometimes they find this a most rewarding and effective aspect of the work; other times it is found to be problematical for them. In this ambiguity of comment and experience, there is a clear indication that lecturers need skills' development in managing interpersonal transactions in groups.

[11] **Particular value is placed by a majority of lecturers on the opportunity of closer personal contact with and knowledge of individual students.**

[12] **In the sample there is no correlation between academic discipline and aims, expectations and approach to small group work.** The only factor which appears

to encourage a similar style and approach between lecturers is collaboration in teaching, which is more likely to happen if the lecturers work in the same or in related areas.

Following these twelve conclusions it will be interesting to examine how the work of the video-recorded groups in action matches up with the intended aims and the expectations of the lecturers concerned. A detailed analysis of the patterns of interaction in the groups is discussed in Chapters Six and Seven of the thesis. In the intervening Chapter Six, however, a close examination of the expectations and attitudes of the other participants in these groups - arguably the most important ones - is given. What impressions, aims, expectations and experiences do students have of small group teaching?

# CHAPTER FIVE

# THE STUDENT PERSPECTIVE IN SMALL GROUP WORK

> "All the evidence is at one in showing a strong student demand for more teaching by tutorial and seminar."
>
> (Hale Committee, 1964)

As long ago as 1964 these findings indicated overwhelming preference of students for teaching in small rather than large groups. There is no reason to believe that this has altered in any way. Indeed the responses in the Students' Comments Sheets used in this project, described in Chapter Three and included as Appendix Two are evidence of the continuing predilection that students have for this method of learning. The sample of students was drawn from the same groups as those in Table 4.1 "Profile of Lecturers", in the previous chapter. There was random sampling of male and female students from Year One right through to Postgraduates and across the academic disciplines listed in that Profile. A small group was defined as one consisting of fewer than sixteen students.

Amount of Small Group Teaching Experienced by Students during their Courses

Section Four of the Comment Sheet required the students to estimate the amount of small group teaching they had experienced during their course. Table 5.1 summarises their statements of the amounts during each year of their studies. The groups are arranged in alphabetical order of academic subject area.

The second column gives the year in which they were when they completed the sheet. Their estimated amount of time spent in small groups then follows. Where approximate is stated in brackets after that percentage, this indicates that there was some slight variation in estimate across the group of students sampled. In these three cases the mean percentage was calculated of the estimates given by each student.

From Table 5.1 it can be seen that the quantity of small group teaching experience varies from nil in the first year in some Engineering departments through to 75% for undergraduate students of History and Russian. It must be noted, however, that this postgraduate sample of Education students completing their Postgraduate Certificate in Education with Russian came from an undergraduate academic discipline, in which it was highly unlikely that any large groups existed. It was probably then a matter of circumstance rather than choice, which was responsible for their large amount of small group work.

If the year of the course is examined in detail, we find from this sample that an average of 27.5% of student contact time is spent in small group work. There are, however, notable

## Approximate Amounts of Small Group Teaching Experienced by Students

| Subject Area | Year | Amount in Year 1 | Year 2 | Year 3/4 | PG |
|---|---|---|---|---|---|
| Education (General) | Postgraduate | | * Various | | 50% |
| Education (Russian) | Postgraduate | | 75% | | 50% |
| Engineering | 3 and 4 | 0% | 0% | 20% (approx) | |
| French Studies (Literature) | 3 | 33% | 33% | 65% (approx) | |
| French Studies (Philosophy) | 2 | 25% | 25% | | |
| History | 3 | 25% | 25% | 75% | |
| Industrial Economics | 1 | 25% | | | |
| Mechanical Engineering | 2 | 20% | 20% | | |
| Medicine Human Morphology | 2 | 25% | 25% | | |
| Medicine (Physiology) | 1 | 25% | 25% | | |
| Medicine (Physiology) | 1 | 25% | 25% | | |
| Production Management | 1 | 20% | | | |
| Social Administration | 1 | 25% | | | |
| Spanish | 1 | 35% (approx) | | | |

* This group was made up of students from a variety of undergraduate disciplines.

TABLE 5.1

deviations from this mean eg in certain Engineering Departments the students receive no opportunity for small group learning, whereas in Russian 75% of the contact time was in small groups. If subject areas are grouped into Faculties, then the averages of small group teaching experience for first year students are:

| | |
|---|---|
| Applied Sciences | 13.3% of total teaching time |
| Arts | 38.6% of total teaching time |
| Medicine | 25.0% of total teaching time |
| Social Sciences | 25.0% of total teaching time |

The Education Faculty is not referred to here, since it has no undergraduate intake.
In Year Two the picture described by the students in this sample is of exactly the same amounts of small group teaching in all subject areas represented as in the first year. The variation in the sample comes in Year Three, when those students towards the end of their undergraduate courses indicated a substantial increase in the amount of time spent in such groups. The overall average goes up to 58.75% of the students' timetable, but the difference between the Applied Sciences and the Arts is still considerable with an average of 71.66% in Arts subjects and 20% in Engineering.
This data gives us an overview of the provision of the small group learning opportunities for this sample of fifty students drawn from fifteen subject areas across five Faculties. It would be invidious to interpret the data by suggesting, for example, that much more small group learning opportunities are created in the Arts subjects because those lecturers are more aware of the value for the learning development of such opportunities for their students. The case is probably rather that size of student intake affects timetabling and grouping in all subjects. Staff-student ratios might also vary. Traditional teaching approaches have evolved and been handed down from generation to generation of lecturers in specific disciplines. There is in fact no evidence from the previous chapter in the detailed analysis of lecturers' aims and attitudes to this teaching method, that a greater understanding of its potential value exists in the Arts. In fact from that previous evidence there is a suggestion that a greater appreciation of the potential of the group process exists in pre-clinical Medicine regarded by many as a subject extensively taught didactically and in large groups.

Students' Responses in Section One

**What, do you consider, was the lecturer aiming to achieve in this class?**

The responses by the students in this section can be categories into the following areas of comment on the intended aims of the class.

1) Increasing Students' Understanding

The word "understanding" was mentioned more by these fifty students than any other single learning process alluded to. Different types of understanding were referred to, as for example, the comments by several students on an Engineering class indicated:

> "to increase our basic understanding of the concepts in the subject under study."
>
> "an understanding of the problems in this type of role specification."
>
> "an understanding of how the theory learnt so far applies to real life."

Three distinctly separate layers of understanding emerge in the above comments. One student saw this teaching session as an opportunity for extending his grasp of the basic learning points, another saw it more particularly as focusing on insight into difficulties inherent in a process, and the third referred to the function of this session as helping them to relate the theory to the practice in real life. All three students here suggest implicitly that this particular teaching process enables a deepening of their reception of the knowledge already transmitted in other ways during their course. In this, they are themselves demonstrating an understanding of the essentially different purposes of small group learning as compared with large group teaching.

Such references to gains in increased understanding permeated the sample of comments from all subject areas. With reference to one of the classes in Physiology a comment was made, which went beyond understanding:

> "to try to get us to understand and assimilate a certain part of the course."

This allusion to assimilation implies an appreciation by the student of a third stage in the learning process ie

a) transmission of knowledge

b) understanding of that knowledge

c) assimilation of it.

Her comment indicates that small group teaching contributes to both the second and third stages of that process.

The second most commonly mentioned area on the sheets identifies a recognised aim, which the students often linked to this first one. They indicated frequently that the following aim of encouraging student contributions and communications between all the group participants was the principal way in which understanding was increased and the assimilation process achieved.

2) An Opportunity for Personal Involvement and For Communication

It is intended in this sub-section to treat together two broad areas of reference by the students. There were many comments on the sheets concerning the possibility in this teaching forum for communication - student to student; student to lecturer; lecturer to student - and for discussion. Additionally the students referred frequently to the significance of small groups for their own personal, individual involvement in this communication process and therefore in their learning development.

As previously indicated several students linked this aim to the first one of increasing understanding. With reference to a small group in Production Engineering, in which a role-play was transacted, one student wrote:

> "to help the class understand how a company is run, by their active participation in running one."

Here the student perceives a deepening of his understanding by a technique which enables him to be personally involved and active in the learning process.

Another student comments on a class in Industrial Economics that:

> "Through discussion I find I can understand lecture notes better."

Again the implication here is that active participation, this time by the verbal interchange of ideas and information, increases students' understanding of their subject.

Some students commented on the lecturer's intention of promoting discussion, without linking it to any particular objective, rather seeing the discussion process as an end in itself. Comments such as the following were common:

> "to provoke discussion of various ideas in the text."
>
> "to get us to participate in putting forward our views"
>
> "to get us to talk abut common problems."

A few of the students perceived the small group as an opportunity for them to practise skills outside those associated with the content of subject. One student wrote of her French Literature class as:

> "A general discussion about three prepared chapters with the aim of encouraging us to express our views."

Here she is referring as much to the importance of practising the art of argument as she is of discussing the content of the three chapters. Another student, this time of Engineering, put forward what he saw as the two aims of the class:

"Communication between lecturer/student and students/students.
Ability to express our points of view."

This student makes no reference at all here to subject matter but perceives the aims of the class as the facilitation of communication between all participants and the development of the students' abilities in the verbal expression of ideas.
Just as with the analysis of comments in (1) above relating to increased understanding, in this area also there was no perceptible correlation between particular academic disciplines and the aims of communication and participation. Responses elicited from students in all the Faculties represented indicated that this was a primary aim.

3) Encouragement of Students to think and form opinions

"To get students to think about theories.
To get us to form a personal opinion about the value of those theories."

One second-year student of Medicine indicated thus that the small group permitted the lecturer to aim at promoting deeper thought by the students, in order to help them develop the capacity for taking informed decisions. This feature of group work was echoed in several comments from students not only within Medicine but also in other disciplines.
When a First year student of Medicine wrote the following of her case study class in Physiology, she was also referring to the role this type of class played in making her think more deeply about particular patients' symptoms and in developing her ability to make a judgement based on these deeper considerations, before treating patients with drugs.

"To make us see that simple problems on the surface may be more complicated underneath.
To get us used to forming a prognosis before prescribing drugs."

One of the students of French extended this purpose of small group work by writing that it not only encouraged students to think, but also to have their own interpretations and to develop the conceptual and verbal skills of defending those interpretations.

"To encourage the student to defend a particular point of view or interpretation of the passage to the other members of the group."

In other Arts areas as well as in the Social Sciences, students alluded variously to this function of their seminars:

"Generally to make us think."

"To evoke the thoughts of the class - to make them think."

"Forcing you to think for yourself."

Through all the above quotations in this sub-section comes the suggestion that the teaching and learning processes in small group work encourage an increased depth and breadth of thought and interpretation within the students of the content of their various courses. This special function is identified by students of several Faculties.

4) Individual Attention and Assessment of Knowledge and Skills

One of the video-recorded classes had the particular purpose of giving the students an opportunity of identifying difficulties they were having with the content of the course and additionally any other problems, perhaps personal ones, they might be encountering. This group from Mechanical Engineering was fulfilling then, as much a pastoral function as an academic one, and it was understandable therefore that all the students from this class within the sample mentioned this as its primary function as follows:

> "To find out how we were managing with the course."
>
> "To help with any problems we encountered."

This tutorial was also identified by the lecturer as a "trouble-shooting class", in which he acted not only as academic tutor but also as the traditional *moral tutor* used to do.

With reference to other groups students pointed out the specific aim of their small group classes of giving them an opportunity to receive individual attention on questions which arose from material covered in lectures, or to fill in any gaps in their knowledge. For example the following comment was made of an Industrial Economics class:

> "... aims to achieve a clear understanding of the question, to bring up problems which might be dealt with individually..."
>
> "to tell us things we did not already know."

Linked to this aspect of individual attention were many comments, again made by students from all disciplines, concerning the assessment of individual students' understanding, progress and skills. Some referred to the aim of this teaching medium as enabling the lecturer to check up on how much they know or don't know. Diagnostic testing was described as follows across several areas:

> "to see that we had a basic understanding of the text."
>
> "to find out how much we knew about the topic."
>
> "to correct any misunderstanding we showed."

The above comments drawn from the sheets of students from three different Faculties refer to the process, carried out by lecturers, of gauging whether the students have adequately

assimilated information or practised skills, in order that they are ready to move on to the next stage. If not, then any gaps are filled or misunderstandings and difficulties remedied. An important stage is alluded to here in the cumulative process of learning. Also referred to in connection with testing was the part small groups pay in contributing to the formal assessment process of knowledge and of skills.

5) Small Groups as Extensions of Lectures

Occasionally the role of small group teaching as a forum for providing added information and ideas following lectures was identified. This was mentioned by students in four groups, representing four Faculties - Arts, Education, Engineering and Social Sciences. Most of the comments in this connection indicated that the tutorial in question was designed to *complement* or *continue* the lecture, with which it was associated. A student of Engineering wrote as follows:

> "The aim is to extend the thermo lectures and to receive feedback on his lecture material and methods of putting it across."

The implication in the first part of the above statement is that extra information is given to add on to that transmitted in the lecture course, although it is not made absolutely clear what this student understands by "extend". One other extension activity he alludes to is that of the tutor having an opportunity to check on how his lectures are being received. This is an interesting dimension only referred to this once in the sample. It is the only reference to student feedback on lecturer performance.

A comment by a student in the Social Sciences, defined more closely this *extension* function of small group work:

> "Elaboration of various principles in the lecture."

Here the implication is not of additional information being supplied, rather to the information and ideas already disseminated in the lecture being amplified and illustrated, to aid the students' understanding. A similar feature of small group follow-up work is illustrated by the following comment of a student of History.

> "To complement our lecture course by studying sources of a relevant period."

Again a complementary function rather than a sequential one is referred to.

In conclusion it can be seen that the fifty students in this sample identified five main areas of intention in their experience of small group work. Their comments showed an understanding of the specific purposes and functions of this teaching medium, and their

perceptions of their lecturers' aims for the classes related accurately to the expressed intentions of the lecturers analysed in the previous chapter.

Students' Responses in Section Two

**In what ways did the small group teaching situation help to achieve these things?**

Having identified the aims, the students were invited, just as the lecturers had been, to indicate the peculiar qualities of small group work, which contribute to the achievement of the outlined aims. The aims of:

(a) increasing understanding
(b) facilitating discussion/communication
(c) encouraging deeper consideration and thought
(d) giving individual attention

and (e) extending the lecture course

had all been identified by students from a variety of subject areas and year groups. They then indicated in Section Two four aspects of small group which aided the fulfilling of these objectives.

1) Facilitation of Individual Expression of Ideas

Many references were made to this particular quality of small group work, whereby both the possibility was created and the permission given by virtue of smaller numbers and closer involvement with the lecturer, for students to express their ideas, ask questions and interrupt to clear up difficulties. Comments such as the following sample within this category indicate the significance for the development of students' understanding, the remedying of misconceptions and the refinement of their capacity for verbal expression and argument, of this opportunity for discussion and interchange of ideas.

> "Discussion of particular problems so that they can be resolved."
>
> "Much more time to ask questions. Easier to ask questions than in a big lecture theatre. More time can be devoted to the individual and therefore achievement can be greater."
>
> "It enables the student to lead the topic in a direction that will be beneficial to him."
>
> "Allows me to express verbally my ideas on how I understand the topic. If my representations are correct, incorrect of partially correct is then conveyed to me by the lecturers. And so my understanding is developed."

2) Informal, Intimate and Secure Atmosphere

All three adjectives above were used by students to describe the reasons for their ability to contribute to and participate in those discussions emphasised in the first quotation above, which in turn enhanced their understanding of the subject matter. There was implicit comparison between this teaching method and others experienced by the students, when they spoke of individuals contributing more readily and more confidently than in other situations.

> "In a small group one tends to be more relaxed and at ease. In a large lecture-type class, one is constantly aware of the barrier between lecturers and students. Hence one is inhibited."

Particular reference was frequently made to shy students:

> "Atmosphere of a small group can help shyer students to take part."

One student of Engineering underlined the significance of the secure framework created by the small group, within which he could feel more confident in taking responsibility for his learning.

> "It is easier for students to be more sure of themselves when they know they have to take charge of the situation, but that there is help available, if they request it."

Informality and intimacy of the group processes and atmosphere were alluded to most frequently in ways such as the following:

> "It was more *intimate* ie the lecturer was talking to single people as opposed to a large group, so one concentrated better on the subject material. One can also interrupt and clear up small misunderstandings eg it doesn't have the formality of a lecture."

Such comments as those above in this section clearly indicate the importance for the students in their learning of close contact with their lecturers and of opportunities when the perceived barriers of authority and formality are broken down, with the result of enabling more readily questioning and testing out of knowledge, ideas and interpretations.

3) Collaborative Working

Two of the students referred to a process of working, which was brought about by the opportunity for close contact with their lecturers, and which went beyond discussion, participation and exchange of ideas. These students wrote about *sharing* in the solution of problems and of *reasoning together*.

"We are able to talk through the problem and reason together, so that we understand why a certain conclusion is reached."

This student of Medicine expresses his experience of a collaborative approach to problem-solving not only in the use of the phrase "reason together" but also in his use of the pronoun "we" which is unusual within this sample. Few students indicate in their use of pronouns a shared approach to common problems. Where pronouns are used it is most frequently *I* or *he/she* with reference to the lecturer.

Although two students are very few out of a sample of fifty, the point they make is an important one. Both the students were video-recorded in first-year groups studying Pharmacology and Physiology within the School of Medicine. It is, therefore, only within one subject area that students describe a working atmosphere of collaboration within their small groups.

4) Effects of Direct Contact with the Lecturer

Many comments revolved round the process brought about by the directness of the contact with the tutor. Some wrote of being *forced* by this to be involved, not in a disparaging way, but suggesting that this was a productive aspect.

"Direct questioning forces thought processes."

"Forces students to pay attention, therefore concentrate."

The effect of this increased concentration and consideration of the subject matter, resulting from the closer relationship with the lecturer in small group teaching, was further described by other students. Reference was made to being enabled to think and reach independent conclusions, which could be expressed and therefore tested out.

"Able to think through a problem and reach and express a conclusion yourself."

Another student related the effects of closeness of contact, opportunity for thought and expression of it to an important aspect of his learning development thus:

"Small group work helps you develop your power of analysing problems and their solutions."

Here particular reference is made to the development of those analytical skills, important across all subject areas and best practised in a teaching medium which encourages involvement and exploration.

The above areas of individual attention and expression, of directness of contact with the lecturer, of intimacy, informality and security of atmosphere, and of collaborative

approaches to work were seen by the students as being contributory to the achievement of the aims outlined for their classes. In the final section, prior to the summary, a brief overview will be given of the likes and dislikes the students expressed of their experiences of learning in small groups. This following section is believed to be of as much significance as the other analyses of student comment, since enjoyment in learning is a very powerful motivating force and lack of it a strong de-motivator.

Students' Responses in Sections Three a) and (b)

**Please list some things you enjoy about being taught in a small group.**
**Please list some things you dislike about being taught in a small group.**

The most immediately striking feature of the responses in Section Three was the contrast in the amount of comment written in sub-sections (a) and (b). Students registered comparatively little in the space for dislikes and much more when they were recording things they enjoyed. Quite frequently there was a nil response in Section 3(b) - eleven out of the fifty students indicated that there was nothing they disliked about this method of teaching.

1) Enjoyable aspects of small group work

The enjoyable features described by the students, often at some length, could be categorised into five broad areas:

(a) Opportunity for discussion and interchange of ideas.
(b) Flexibility - in contrast to other teaching methods.
(c) Favourable comparison with lectures.
(d) Opportunity for personal, individual involvement.
(e) Conducive to more effective learning development.

Much of what was expressed in connection with (a) above reinforced what has already been referred to previously in this chapter. Comments under (b) and (c) above were new and gave an interesting and useful insight into students' appreciation of the special qualities of their small group work.

> "I like the flexibility of a small group. We aren't bound to a rigid schedule."

The indication here and in several other comments of this nature is that students feel the compulsion of coverage, just as lecturers do, and the rigidity this imposes often on teaching approach and style. The students evidently enjoy the opportunity of being able to alter the pace, to question and to influence the direction of the teaching, all of which is made

possible because of fewer members and closer contact with the lecturer. Other students made more precise comparisons with lectures. They implied a dislike of them and a complementary appreciation of small group work.

> "Getting to know the lecturer better rather than just being a crowd in a lecture room, taking copious notes from a lecture that has obviously been given many times before."

> "It can actually be enjoyable. Lectures rarely are."

Such references as above were made by several students and indicate a dissatisfaction either with the lecture as a teaching method and/or with the way in which it has been carried out in their experience. The use of the adjective "enjoyable" and the adverb "actually" above suggests surprise, and an expectation that teaching is *per se* an activity, which is tolerated as a means to an end, but largely not enjoyed. This type of comment is one upon which all those involved in the provision of higher education should reflect. Learning ought, indeed, to be a pleasurable activity for it to be effective.

Comments concerning the welcome opportunity for students to be personally involved in the teaching processes were numerous in this section of the questionnaire. It was the key feature for students from a variety of disciplines. The most striking statement made in this context read as follows:

> "By being in a smaller group, one feels part of the class rather than just another face in a sea of faces. I actually feel more part of the university as a whole."

This reference to the sense of anonymity and isolation sometimes felt by students identifies powerfully the potential effectiveness of small group work. Feeling a part of the class, a part of the Department and, in addition a part of the total university community is bound to be more beneficial to the student's overall development than existing throughout the course as one in a "sea of faces".

Perceptive responses were also given concerning the potential for effective learning development within small groups. Once again the word *understanding* featured frequently, as did the words *analysing* and *remembering*. The following are two examples of such comments:

> "Helps develop your power of analysing problems and arriving at solutions."

> "I personally have a greater influence on what is being discussed. I can actually remember and feel I understand what we are discussing."

The above quotations underline the importance of the students' experience of learning in small groups for the development of their analytical skills and their deeper understanding

of the subject. The phrase, "I can actually remember", indicates also the significance of this work for reinforcement and consolidation of what is being learnt. The suggestion is that the ideas, knowledge and skills being dealt with are reinforced in the memory of students by the fact that they are operating in a small group. Presumably this is attributable to the "greater influence" referred to in the quotation, ie that the student can ask questions to clarify and therefore consolidate what is being learnt.

2) Expressed Dislikes of Small Group Work

The dislikes expressed by students fell into three main categories, although it should be remembered that 22% of the sample registered no dislikes of this teaching medium. The categories of dislike were as follows:-

(a) Problems with interaction patterns.

(b) Feeling threatened by specific aspects.

(c) Learning difficulties associated with the method.

The comments concerning (a) above were reminiscent of those expressed by lecturers about their dislikes ie problems with dominant personalities or difficulties in getting people to talk. The students frequently wrote of their discomfort with silences. In addition, several indicated a dislike of being made to be involved eg

> "Being asked to contribute, when you don't want to."

Some of the students in the sample wrote in stronger terms of feelings of threat principally about being in closer contact with their lecturers and being assessed by them.

> "Sometimes you feel threatened by the closeness of the lecturers."

> "A feeling of being assessed by the lecturer through your answers and through your attitudes."

This latter student refers to inhibitions felt in the individual expression of ideas and attitudes, which is caused by the process of having to be involved, because of the very nature of small group teaching. The inhibition and fear is experienced because the student feels that the medium is being used as an assessment tool. This should cause us to reflect on the role of assessment in small group teaching and how it might be clarified, in order that students feel less threatened by it.

One rather amusing additional comment made by several students was their dislike of small groups, because of the fact that they had to do some work for them! Within a small group there is no possibility of "passengers", no-one can "hide out" and one has to prepare for them.

"You have to have completed a certain amount of work to understand what's going on."

Although this was written as a dislike, it might otherwise be construed as a salutary and constructive aspect of small group teaching!

The third area alluded to in the comments addressed issues of teaching and learning. Some wrote of practical difficulties such as the following:

"Problem of discussion whilst taking notes."

Such a difficulty, expressed severally by students, could easily be remedied by the lecturers' giving time for taking notes, discouraging them, if they are not necessary or by preparing handout material. This expressed anxiety of students would not be difficult to rectify. More problematical areas, however, were referred to.

The nature of questioning and the particular skills involved in questioning in small groups were raised. There was implicit criticism of lecturers' inability to handle this technique effectively.

"Being directly asked *vague* questions."

"*Interrogation* on certain aspects of the course, especially the lecturer's specialist topic."

The above selected comments refer both to the content and structure of questions and to the method of asking them. "Vague" indicates lack of preparation, and confused and perhaps rambling format. "Interrogation" describes both the authoritative questioning style of the lecturer and the feelings of the student as a result of it. It is evident from these and other comments on this theme that questioning skill and technique is an area on which attention should be focused by lecturers for improvement.

Pace was a further problem area alluded to by a few of the students. There was some disquiet about the varying pace of students of different abilities. Some expressed frustration at being held back by the questions raised by other members of the group.

"I am sometimes frustrated at being held up by the problems or queries of other group members."

The final teaching and learning problem alluded to was that of unnecessary repetition. One group, in particular, felt that the tutorial in question had served no useful purpose, since the information contained would be given again in lectures.

"Details could and will be given in lectures later, so this class was unnecessary."

This could indicate either that the content of the class was lacking or that the students did not value the reinforcement and consolidation purpose of it. It signals a cautionary note, however, to lecturers to ensure that what is done in small groups is perceived by students to be worthwhile, and that the purposes and value of the session should be made explicit.
These four issues of notetaking, pace, repetition and questioning were the key features identified in the dislikes section, which were related to the actual teaching technique and method of the lecturer. Of these four, the one which received by far the most attention from students in their comments was questioning.

Summary of the Analysis of Student Responses

**"It's the only way really to learn."**

This quotation from one of the sheets sums up the overall response of students, when they were asked about their experience of group work. The following are the main conclusions which can be drawn.

[1] **Students enjoy small group work.**
Enjoyment is an aspect not to be underrated. There are still assumptions in the culture of our education system at all levels that study should be arduous and unpleasant, if it is to be effective and successful. Disciplining the mind rather than developing and stimulating it is still often the implicit basis of many areas of education. At the level of higher education, if not at any other level, this assumption is inappropriate and even counterproductive. Joy in and enthusiasm for learning should be one of the major aims of lecturers in universities.

[2] **Students receive on the whole little small group work.**
The sample indicates a variation from 0% to 75% of contact time spent in small groups. The 75% is, however, very rare. An overall average estimate was 27.5%.

[3] **There is a clear understanding by students of the aims of small group work.**
Not only did they perceive of this kind of teaching as having peculiar and distinctive aims, but also their expression of these aims coincided accurately with those expressed by their lecturers.

[4] **Students' appreciation of desirable methods is also perceptive.**
This sample of students indicated a clear recognition of appropriate methods and styles of carrying out small group work. In Section Two of the Comment Sheets, as well as in Section Three(b) effective methods were identified and equally, inappropriate and ineffective approaches highlighted.

In summary small group learning opportunities are valued highly by students, but there is evidently need for improvement of the techniques and skills of the lecturers, who are responsible for them. In the previous chapter and in this one, clarity of aims and understanding of desirable and productive methods have been indicated by the participating lecturers and then students. Yet some of the student responses indicate that neither the aims nor the methods are always achieved, despite that clarity and understanding. Is there a mismatch in the perceptions of lecturers and of students? Or might there be a mismatch in lecturers between their perceptions of practice and the reality of what happens? In Chapter Six the reality is observed and analysed in order that these questions might be answered.

# CHAPTER SIX

# ANALYSES OF PATTERNS OF VERBAL INTERACTION IN TWENTY CLASSES

## Introduction

> "If you read about it, it sounds very good. Some people every week go into a room and talk about the previous week's lectures; it sounds great, but when you actually come to do it, you sit around without saying anything, and the seminar leader isn't quite sure how to get them started anyway; and this carries on for about twenty weeks - two terms; and you begin to think it's not such a good idea."
>
> (Rudduck 1978)

The above quotation from a survey of student opinion in the East Anglia Project on learning through discussion illustrates a gap between the expectation and actual practice of small group work. The student indicates that his expectation was of something valuable and useful, and that the opportunity to follow up previous lectures was an aim, which he appreciated. However, the reality of the teaching activity - its practice and processes - led to disillusionment and an indication that the aim was not effectively achieved and the expectation of something "very good" remained unfulfilled.

In the previous two chapters of this thesis, the aims and expectations of both students and lecturers in relationship to their small group work have been analysed. The aims enunciated within this sample have been equally clear and the expectations also positive. An analysis of the lecturers' aims has indicated an intention to *clarify* ideas and information for the students by *encouraging* and *enabling* them to become involved in *discussion* and to *participate* in their own learning. Their expectations were of a teaching activity, in which the students would be involved in *expressing verbally* their thoughts, which would allow the lecturers to *identify gaps* in the *knowledge* and *problem areas* to be rectified. The close examination of students' grasp of the aims and of their expectations of small group work demonstrated that they saw the principal aim as gain in their *understanding* through more opportunity for *personal involvement* in the teaching and learning processes, *discussion* of ideas and greater *individual attention* paid to their questions and problems. Their expectation also was of *student participation* and *exchange* of ideas.

The above delineation of aims and expectations of all participants suggests that an analysis of the interaction patterns within a sample of university small group teaching will reveal a high level of student talk - student questioning, student volunteering of ideas and student response to thoughts of their peers and their lecturers. This chapter is devoted to the

detailed analysis of a sample of twenty classes, as explained in Chapter Three, and of the talk which is generated within those teaching sessions. The structure of the examination of the seminars will be as follows:

1) An illustration of the application of the interaction analysis schedule described in Chapter Three. The computer analysis of an Arts and Science seminar is presented and the findings explained.

2) The results of the analysis of lecturer talk and of student talk within the twenty seminars is presented in tabular format. These tables are then commented on in detail.

In the subsequent Chapter Seven the analysis is continued as follows:

3) Student talk is examined in detail across the sample and the classes exhibiting a comparatively high level of student talk are analysed in depth, in order that the nature of the student talk and the reasons for its volume are identified.

4) There follows a summary of the findings and of the conclusions to be drawn.

The student, whose words were cited at the beginning of this chapter described a mismatch between his expectations, his perception of aims, and the actuality of this experience within a course of seminars. This Chapter will explore whether that experience is unusual or commonplace. Shall we find evidence of discussion and student participation in the interaction patterns and in the amounts of student talk relative to lecturer talk, or shall we find the little amount of student participation indicated in the beginning quotation?

1) An Illustration of the Analysis Procedures

The French Studies Seminar (See p109)

This was a French Literature seminar, in which one member of staff and seven second-year undergraduate students participated. The duration of time analysed is approximately thirty-five minutes. From the first section of information displayed, the time lapse diagram, we have a detailed record of which of the seven activities on the schedule is taking place during each three-second interval of the seminar. Thus the first twenty entries on the print-out against the category TL (teacher lectures, explains, narrates etc.) indicate that the lecturer was carrying out that particular activity for one minute. In this way it is possible to focus on any specific section of the seminar and explore the types of lecturer talk or student talk and the interactions between them at that stage.

In the second section, four histograms have been included, one in which the total period the class is considered, and the others, in which the first, second and third eleven/twelve

minute periods are considered. The information is presented in both numerical and diagrammatic form. This information permits the researcher to compare the relative amounts of each given activity, which occurs in the class. For example, in this seminar the total percentage of lecturer talk was 65% compared with 28% student talk. It is interesting to note also the variations in these percentages during different sections of the seminar eg in the first eleven minutes there was a total of 72% lecturer talk and 21% student talk (with only 1% of the student talk being volunteered comment), whereas in the second eleven minute section the percentage of lecturer talk decreases to 52% and the student contribution increases to 40% (with a large percentage increase in student volunteered comment). In the final period considered lecturer input jumps once again to 69% but of the 24% student input, the volunteered talk of 17% has now superseded considerably the amount of student response initiated by the lecturer.

The third part of the computer analysis consists of two composite histograms. Here the percentage amounts of three selected categories during each three-minute interval of the class con be compared in both numerical and diagrammatic form. In these two composite histograms the categories chosen for comparison were firstly the teaching talk categories and secondly the categories of student talk and silence. Here comparative amounts of talk are illustrated ie between the 6th and 9th minute for 90% of the time he was questioning, whereas between the 21st and 24th minute 20% of the time was devoted to lecturer response to student comment and only 28% to lecturing or explaining. Any three categories can be selected and compared in this way.

The final section of the print-out deals with transition and switch matrices. In the first table (transition matrix) the transition at the end of each 3 second interval is plotted, whether it be to a further 3 seconds of the same activity or to a different category. For example, it can be seen here that the most common transition by far was from TL to TL (318 transitions) and the second most common was from SR to SR (99 transitions). The virtue of the switch matrix (second table) is that it eliminates transitions to the same activity and plots only switches from one category to a different one. Attention is focused more readily onto changes of activity. In this seminar the most common *switches* of activity were from TQ into SR (24) and from SR into TR (15). These are predictably common transitions, in that it would be expected that questions from the lecturer would stimulate answers from the students followd by feedback from the lecturer. The silence (S) category is an interesting one. From the transition matrix it can be seen that some more prolonged silences occurred here, since the most common transition was from silence into silence (11). The most frequent switches into silence were from TQ and SR (6 and 5 respectively). Although this analysis does not permit one to say whether or not the silences were productive, it would be enlightening for a further study to go back to the video- or audio-tape here to explore whether these silences were constructive or otherwise, ie whether the students and lecturer

were thinking carefully about formulating a response during these silences or whether they were completely confused and baffled by the comment just made, and waiting to be rescued.

The Production Engineering Class (See p119)

This is a contrasting small group teaching example, since it is:-

a) from the area of Applied Science:

b) made up of 15 students, who are

c) in their first year of study,

d) conducted by a student chairman,

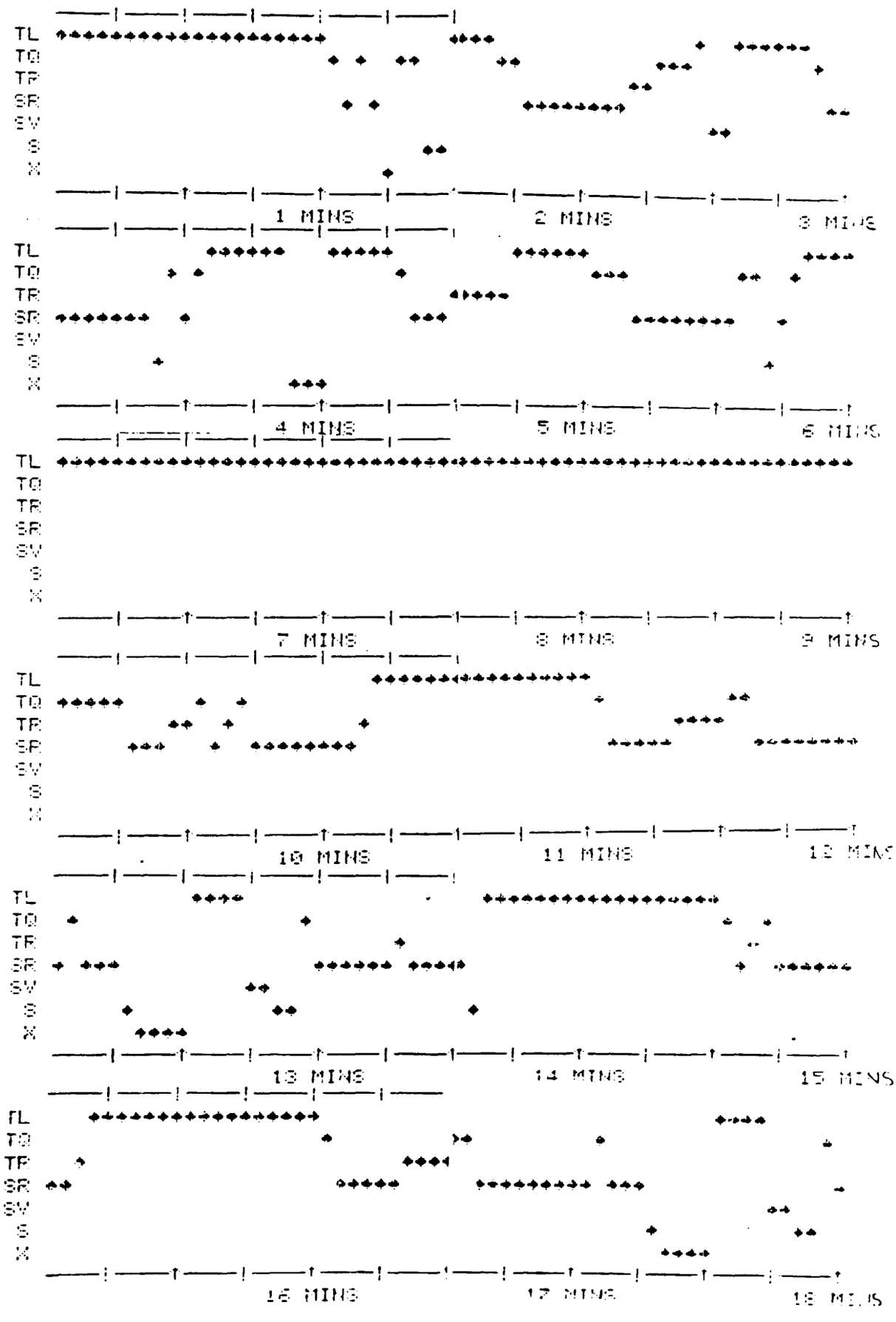
e) organised by *two* staff participants.

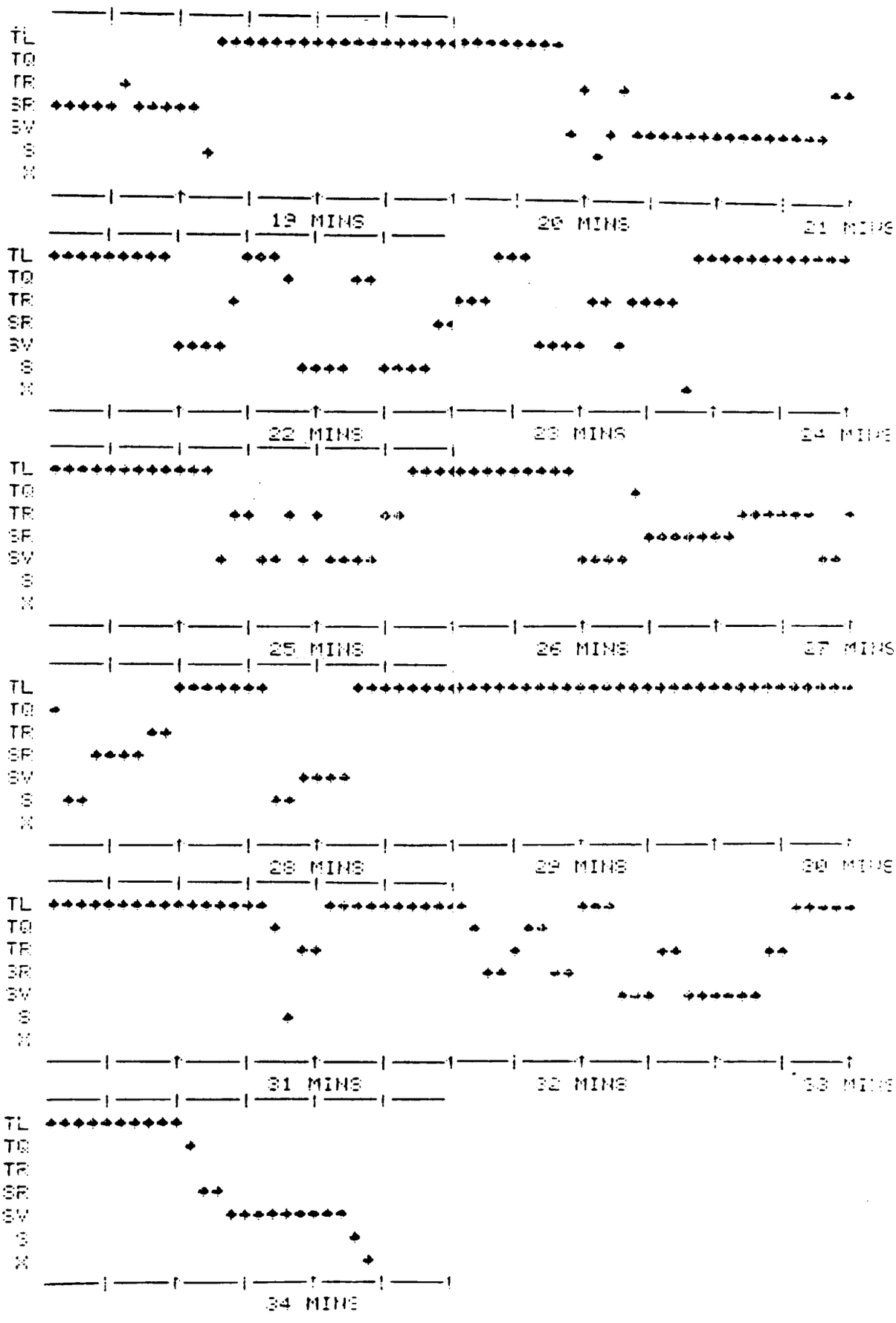
The computer print-out is arranged in the some format as that outlined in the above commentary on the French seminar. Similar analyses of the categories, activities, transitions and interaction patterns can be made, and, in addition, comparisons between those aspects of the two classes.

## FRENCH STUDIES SEMINAR

| | |
|---|---|
| Subject: | French (Literature) |
| No. of students: | 7 |
| No. of staff: | 1 |
| Year of students: | 2 |

TIME LAPSE DIAGRAM
**********

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32 MINS
33 MINS
34 MINS

HISTOGRAMS
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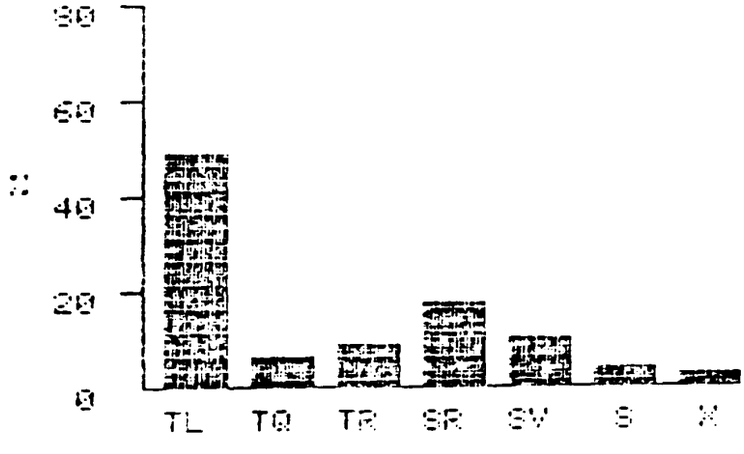
PERIOD CONSIDERED:

FROM: 0 MINS 0 SECS
TO : 34 MINS 42 SECS

TITLE: 'FMHHGMS'

CATEGORY TOTALS AND PERCENTAGES FOR
THE PERIOD,TO NEAREST PERCENT

| CATEGORY | TOT | % |
|---|---|---|
| TL | 343 | 49 |
| TQ | 48 | 7 |
| TR | 59 | 9 |
| SR | 128 | 18 |
| SV | 68 | 10 |
| S | 27 | 4 |
| X | 21 | 3 |



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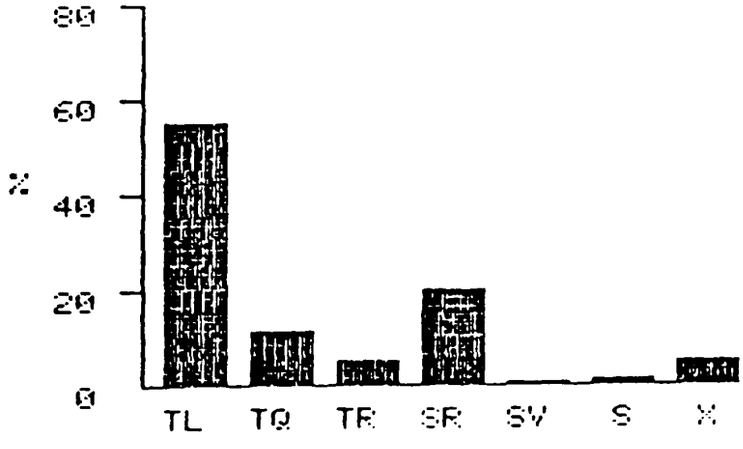
TITLE: 'FMHHTGS1/3'

CATEGORY TOTALS AND PERCENTAGES FOR
THE PERIOD,TO NEAREST PERCENT

| CATEGORY | TOT | % |
|---|---|---|
| TL | 122 | 55 |
| TQ | 26 | 12 |
| TR | 11 | 5 |
| SR | 44 | 20 |
| SV | 2 | 1 |
| S | 4 | 2 |
| X | 11 | 5 |



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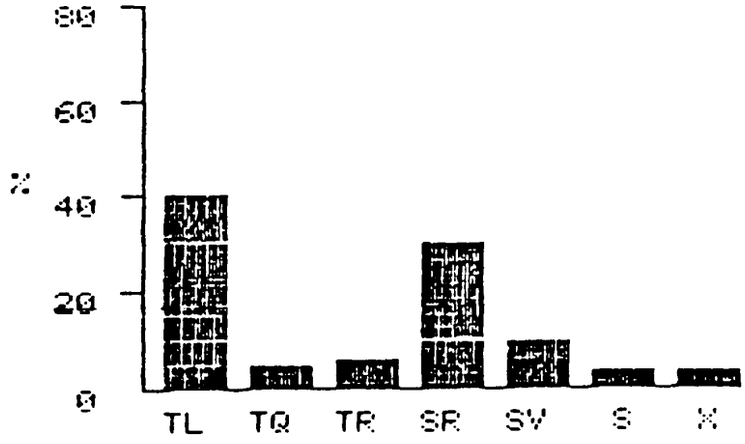
TO : 22 MINS 0 SECS

TITLE: 'FMHHTGS2/3'

CATEGORY TOTALS AND PERCENTAGES FOR
THE PERIOD,TO NEAREST PERCENT

| CATEGORY | TOT | % |
|---|---|---|
| TL | 88 | 40 |
| TQ | 12 | 5 |
| TR | 16 | 7 |
| SR | 65 | 30 |
| SV | 22 | 10 |
| S | 9 | 4 |
| X | 8 | 4 |



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TITLE: 'FMHHTGS3/3'

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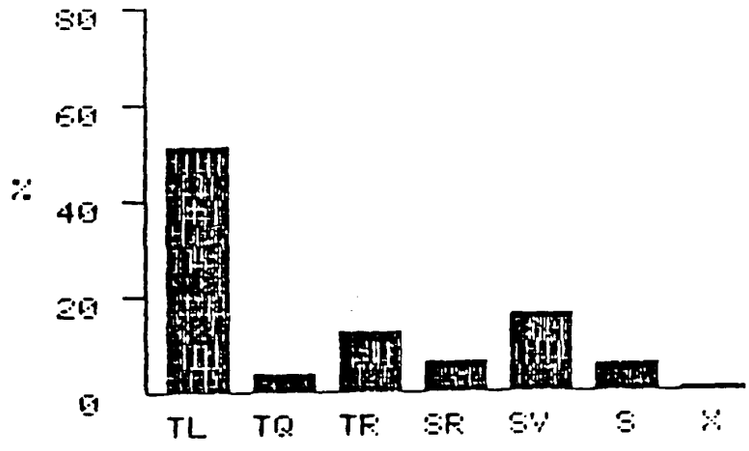
THE PERIOD,TO NEAREST PERCENT

| CATEGORY | TOT | % |
|---|---|---|
| TL | 133 | 52 |
| TQ | 10 | 4 |
| TR | 32 | 13 |
| SR | 19 | 7 |
| SV | 44 | 17 |
| S | 14 | 6 |
| X | 2 | 1 |



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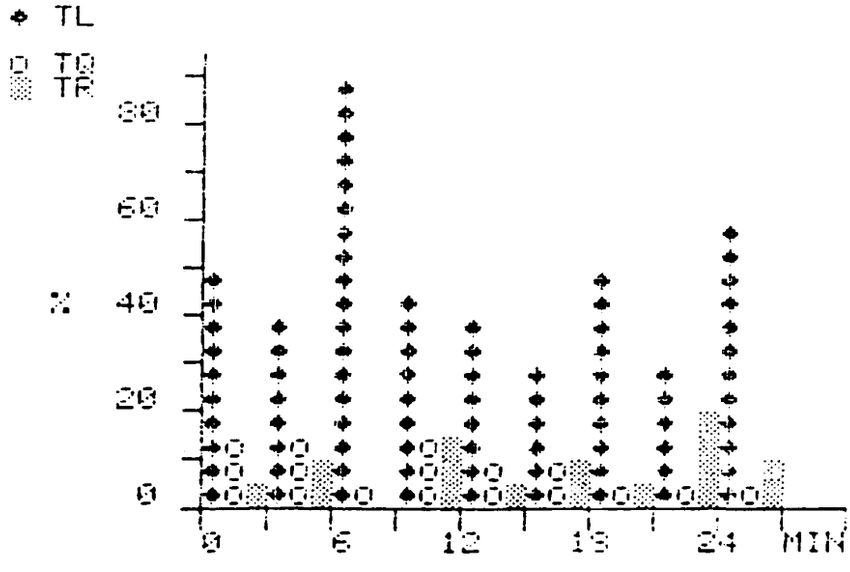
| 3- 6 | 38 | 12 | 8 |
| 6- 9 | 90 | 5 | 0 |
| 9- 12 | 45 | 13 | 13 |
| 12- 15 | 37 | 7 | 2 |
| 15- 18 | 28 | 10 | 10 |
| 18- 21 | 50 | 2 | 5 |
| 21- 24 | 28 | 5 | 20 |
| 24- 27 | 58 | 2 | 10 |
| SYMBOL USED | * | O | ▒ |
| | TL | TO | TR |



COMPOSITE HISTOGRAMS
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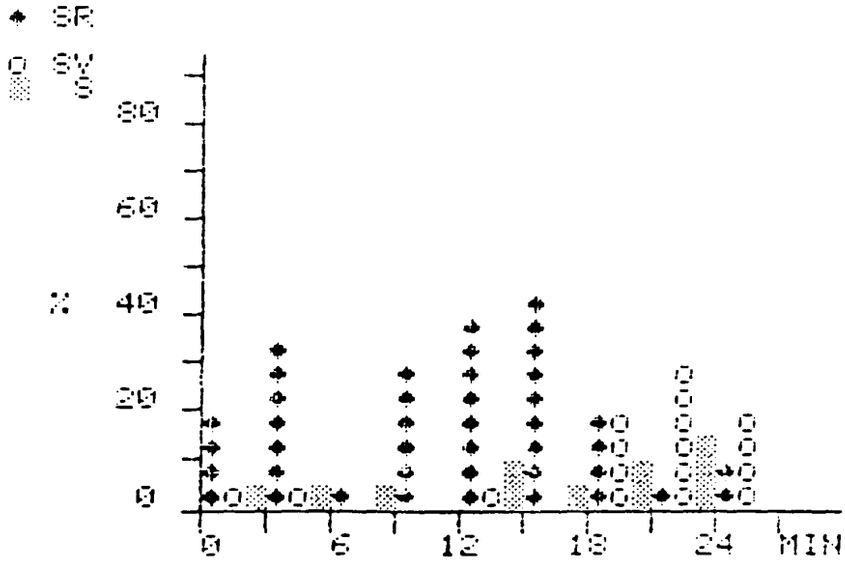
| 6- 9 | 3 | 0 | 2 |
| 9- 12 | 28 | 0 | 0 |
| 12- 15 | 38 | 3 | 7 |
| 15- 18 | 43 | 0 | 2 |
| 18- 21 | 18 | 18 | 7 |
| 21- 24 | 3 | 28 | 18 |
| 24- 27 | 10 | 20 | 0 |
| SYMBOL USED | ◆ | O | ▒ |
| | SR | SV | S |



TRANSITION MATRIX
**********

INCLUDES TRANSITION TO SAME CATEGORY

| | TL | TQ | TR | SR | SV | S | X |
|---|---|---|---|---|---|---|---|
| TL | 318 | 13 | 0 | 0 | 9 | 1 | 2 |
| TQ | 3 | 15 | 0 | 24 | 0 | 6 | 0 |
| TR | 10 | 8 | 30 | 2 | 7 | 1 | 1 |
| SR | 1 | 6 | 15 | 99 | 1 | 5 | 1 |
| SV | 2 | 1 | 13 | 0 | 49 | 3 | 0 |
| S | 3 | 4 | 1 | 3 | 2 | 11 | 3 |
| X | 6 | 1 | 0 | 0 | 0 | 0 | 13 |

LENGTH OF SAMPLE: 34 MINS 42 SECS

| CATEGORY | NO. OF BLEEPS | % OF SAMPLE |
|---|---|---|
| TL | 343 | 49 |
| TQ | 48 | 7 |
| TR | 59 | 9 |
| SR | 128 | 18 |
| SV | 68 | 10 |
| S | 27 | 4 |
| X | 21 | 3 |
| TOTAL | 694 | |

SWITCH MATRIX
**********

EXCLUDES TRANSITION TO SAME CATEGORY

| | TL | TQ | TR | SR | SV | S | X |
|---|---|---|---|---|---|---|---|
| TL | 0 | 13 | 0 | 0 | 9 | 1 | 2 |
| TQ | 3 | 0 | 0 | 24 | 0 | 6 | 0 |
| TR | 10 | 8 | 0 | 2 | 7 | 1 | 1 |
| SR | 1 | 6 | 15 | 0 | 1 | 5 | 1 |
| SV | 2 | 1 | 13 | 0 | 0 | 3 | 0 |
| S | 3 | 4 | 1 | 3 | 2 | 0 | 3 |
| X | 6 | 1 | 0 | 0 | 0 | 0 | 0 |

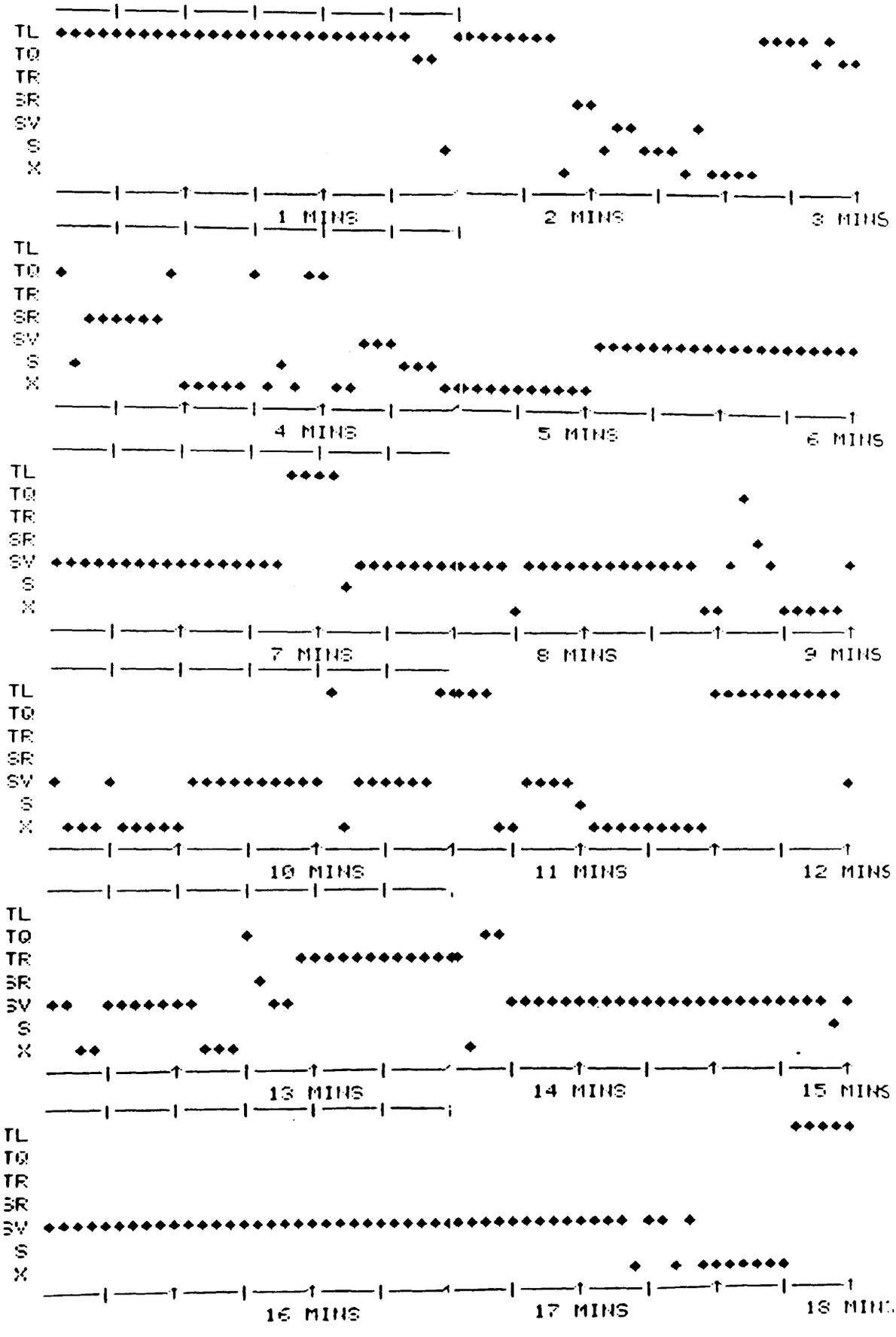
THE SWITCH MATRIX SHOWS THE NUMBER OF SWITCHES FROM ONE CATEGORY TO A DIFFERENT CATEGORY.

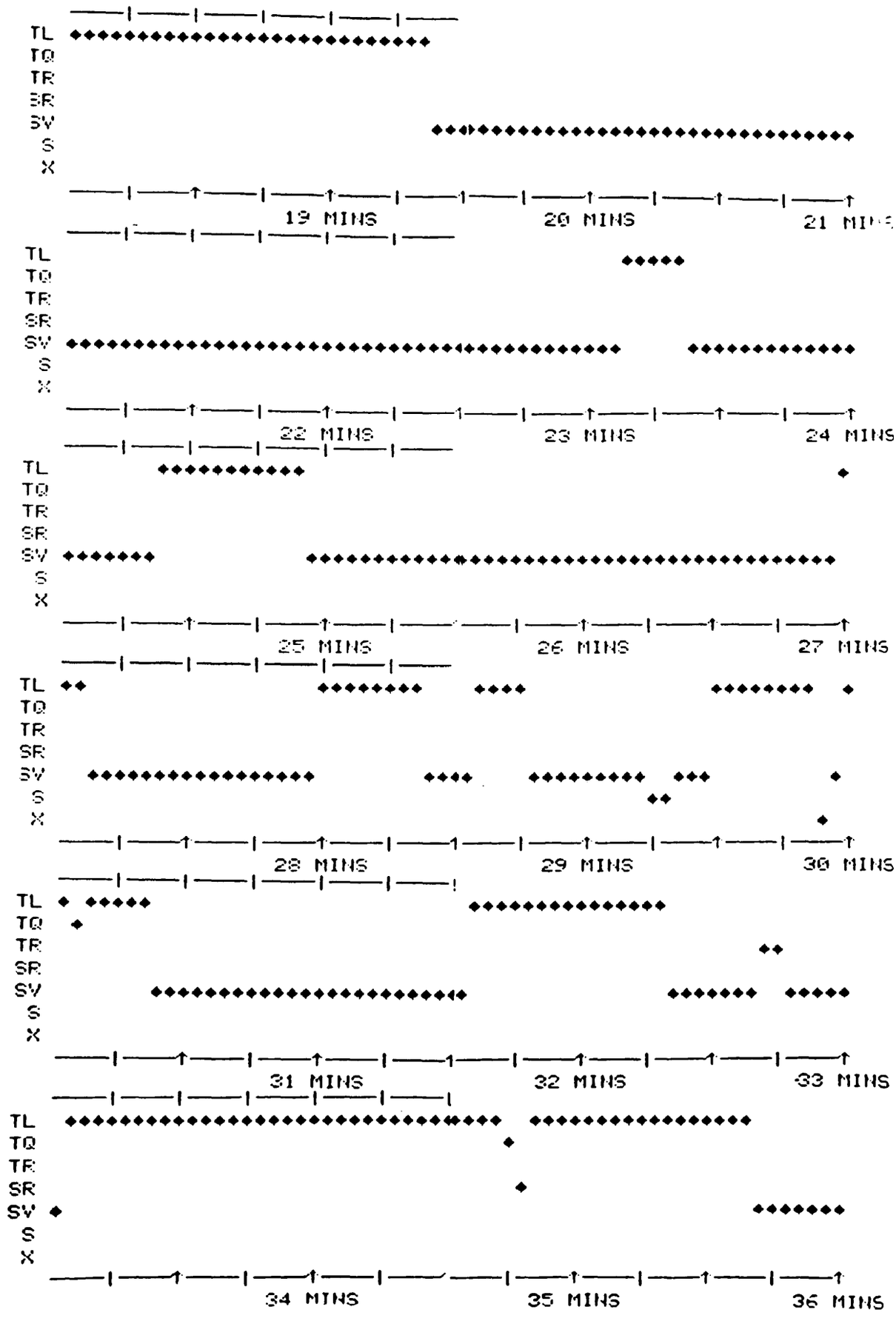
| SWITCHES INTO | NO.OF SWITCHES | % OF SWITCHES |
|---|---|---|
| TL | 25 | 16 |
| TQ | 33 | 21 |
| TR | 29 | 18 |
| SR | 29 | 18 |
| SV | 19 | 12 |
| S | 16 | 10 |
| X | 7 | 4 |
| TOTAL | 158 | |

ENGINEERING SEMINAR

| | |
|---|---|
| Subject: | Production Engineering |
| No. of students: | 15 |
| No. of staff: | 2 |
| Year of students: | 1 |

TIME LAPSE DIAGRAM
**********

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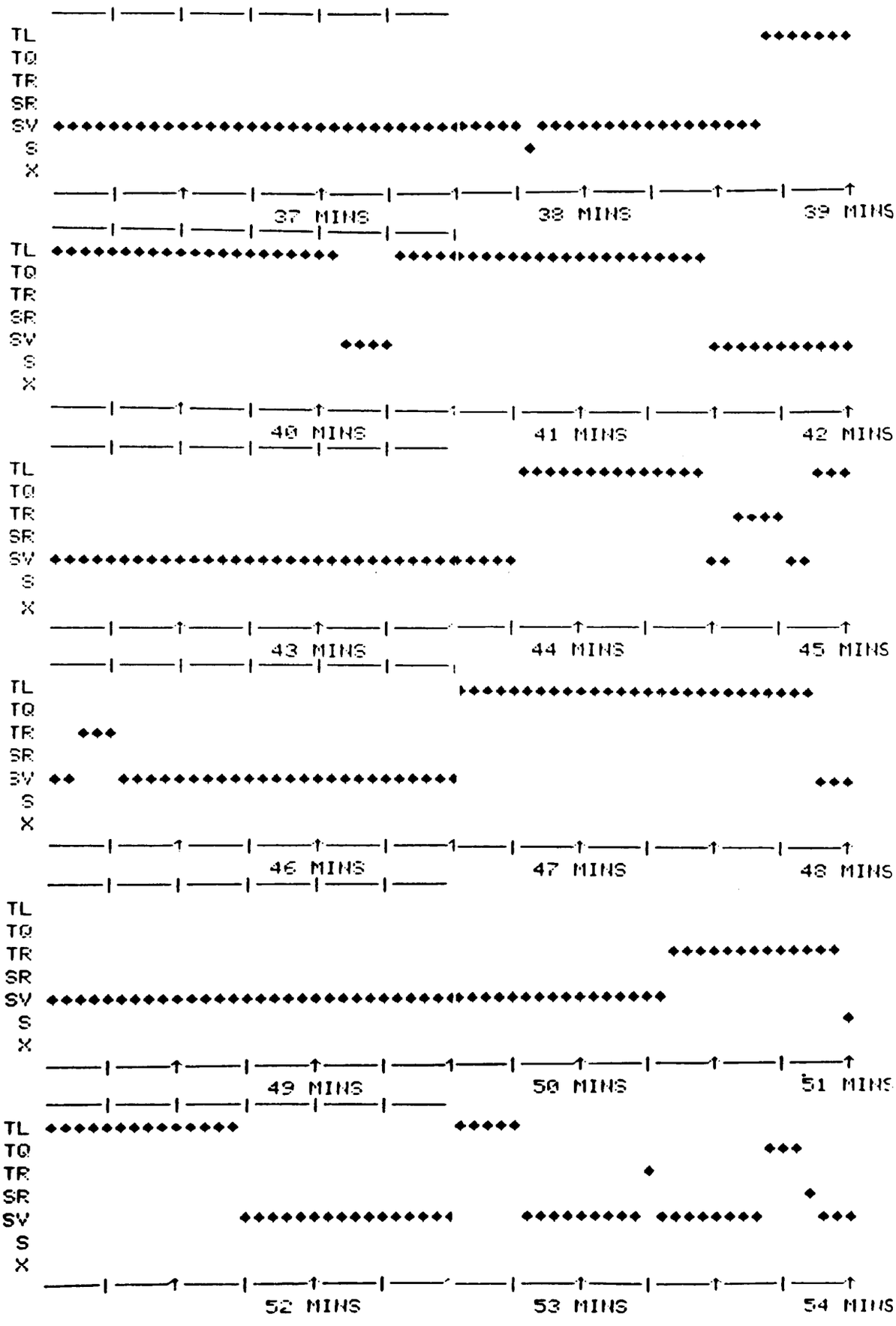
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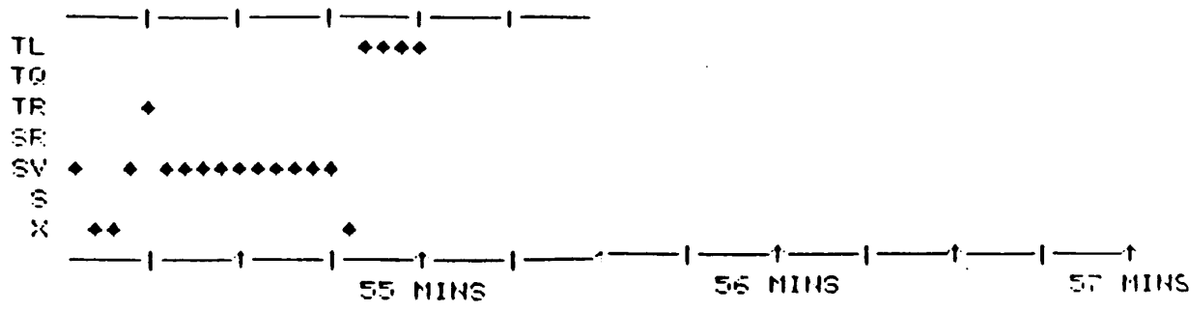


HISTOGRAMS
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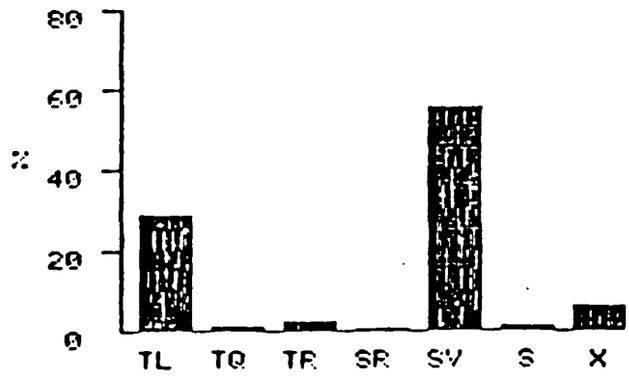
TO : 55 MINS 0 SECS

TITLE: 'PMOGHTGS'

CATEGORY TOTALS AND PERCENTAGES FOR
THE PERIOD,TO NEAREST PERCENT

| CATEGORY | TOT | % |
|---|---|---|
| TL | 321 | 29 |
| TQ | 19 | 2 |
| TR | 37 | 3 |
| SR | 12 | 1 |
| SV | 620 | 56 |
| S | 17 | 2 |
| X | 74 | 7 |



COMPOSITE HISTOGRAMS
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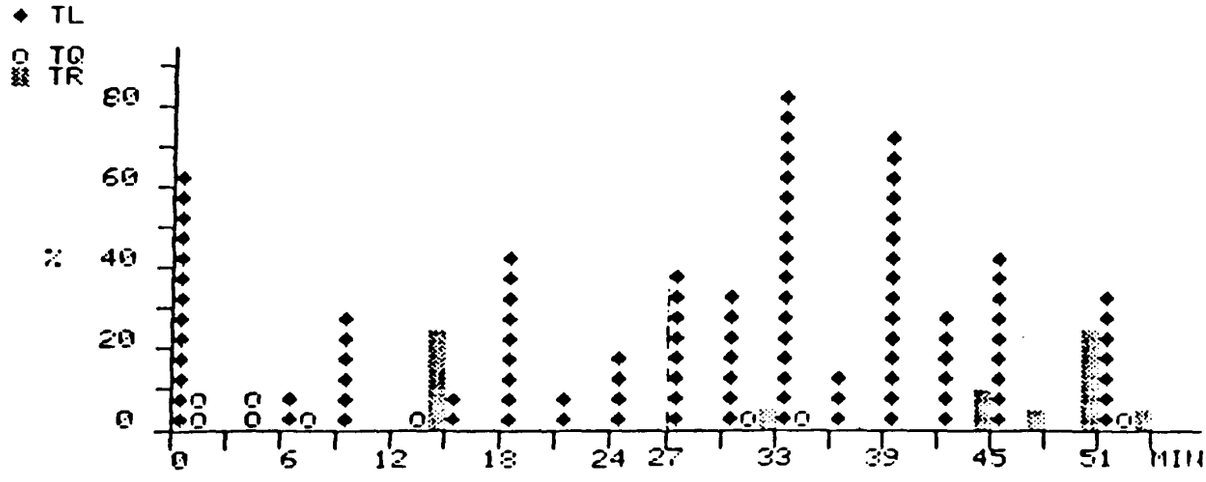
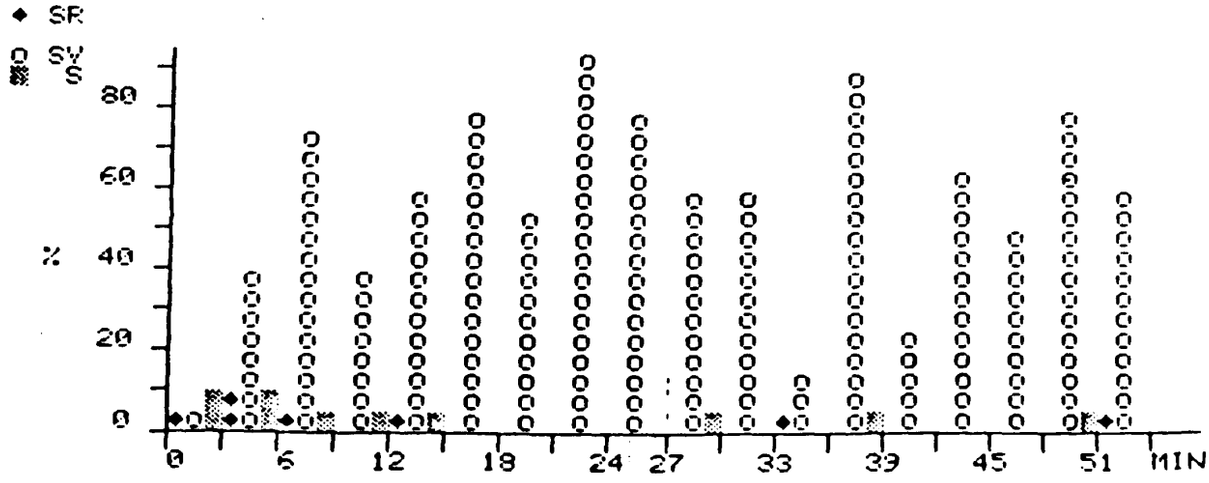
| 3- 6 | 0 | 8 | 0 |
| 6- 9 | 7 | 2 | 0 |
| 9- 12 | 27 | 0 | 0 |
| 12- 15 | 0 | 5 | 22 |
| 15- 18 | 8 | 0 | 0 |
| 18- 21 | 45 | 0 | 0 |
| 21- 24 | 8 | 0 | 0 |
| 24- 27 | 20 | 0 | 0 |
| SYMBOL USED | ◆ TL | O TQ | ▒ TR |
| MINS | 38 | 0 | 0 |
| 27- 30 | | | |
| 30- 33 | 35 | 2 | 3 |
| 33- 36 | 83 | 2 | 0 |
| 36- 39 | 12 | 0 | 0 |
| 39- 42 | 75 | 0 | 0 |
| 42- 45 | 28 | 0 | 7 |
| 45- 48 | 45 | 0 | 5 |
| 48- 51 | 0 | 0 | 22 |
| 51- 54 | 32 | 5 | 2 |
| SYMBOL USED | ◆ TL | O TQ | ▒ TR |
| MINS | 7 | 0 | 2 |
| 54- 57 | | | |
| SYMBOL USED | ◆ TL | O TQ | ▒ TR |



COMPOSITE HISTOGRAMS
**********

| MINS | 3 | 5 | 8 |
|---|---|---|---|
| 0- 3 | | | |
| 3- 6 | 10 | 38 | 8 |
| 6- 9 | 2 | 75 | 2 |
| 9- 12 | 0 | 38 | 2 |
| 12- 15 | 2 | 60 | 2 |
| 15- 18 | 0 | 77 | 0 |
| 18- 21 | 0 | 55 | 0 |
| 21- 24 | 0 | 92 | 0 |
| 24- 27 | 0 | 80 | 0 |
| SYMBOL USED | ◆ | O | ▒ |
| | SR | SV | S |
| MINS | 0 | 57 | 3 |
| 27- 30 | | | |
| 30- 33 | 0 | 60 | 0 |
| 33- 36 | 2 | 13 | 0 |
| 36- 39 | 0 | 87 | 2 |
| 39- 42 | 0 | 25 | 0 |
| 42- 45 | 0 | 65 | 0 |
| 45- 48 | 0 | 50 | 0 |
| 48- 51 | 0 | 77 | 2 |
| 51- 54 | 2 | 60 | 0 |
| SYMBOL USED | ◆ | O | ▒ |
| | SR | SV | S |
| MINS | 0 | 20 | 0 |
| 54- 57 | | | |
| SYMBOL USED | ◆ | O | ▒ |
| | SR | SV | S |



TRANSITION MATRIX

INCLUDES TRANSITION TO SAME CATEGORY

| | TL | TQ | TR | SR | SV | S | X |
|---|---|---|---|---|---|---|---|
| TL | 293 | 5 | 0 | 0 | 17 | 1 | 4 |
| TQ | 2 | 7 | 0 | 4 | 1 | 2 | 3 |
| TR | 0 | 0 | 30 | 0 | 5 | 1 | 1 |
| SR | 1 | 1 | 0 | 6 | 3 | 1 | 0 |
| SV | 18 | 2 | 7 | 0 | 574 | 6 | 13 |
| S | 2 | 0 | 0 | 1 | 5 | 5 | 4 |
| X | 4 | 4 | 0 | 1 | 15 | 1 | 49 |

LENGTH OF SAMPLE: 55MINS 0 SECS
NUMBER OF BLEEPS: 1100

| TRANSITION TO | | NO. | % |
|---|---|---|---|
| | TL | 320 | 29 |
| | TQ | 19 | 2 |
| | TR | 37 | 3 |
| | SR | 12 | 1 |
| | SV | 620 | 56 |
| | S | 17 | 2 |
| | X | 74 | 7 |
| | TOTAL | 1099 | |

SWITCH MATRIX

EXCLUDES TRANSITION TO SAME CATEGORY

| | TL | TQ | TR | SR | SV | S | X |
|---|---|---|---|---|---|---|---|
| TL | 0 | 5 | 0 | 0 | 17 | 1 | 4 |
| TQ | 2 | 0 | 0 | 4 | 1 | 2 | 3 |
| TR | 0 | 0 | 0 | 0 | 5 | 1 | 1 |
| SR | 1 | 1 | 0 | 0 | 3 | 1 | 0 |
| SV | 18 | 2 | 7 | 0 | 0 | 6 | 13 |
| S | 2 | 0 | 0 | 1 | 5 | 0 | 4 |
| X | 4 | 4 | 0 | 1 | 15 | 1 | 0 |

THE SWITCH MATRIX SHOWS THE NUMBER OF SWITCHES FROM ONE CATEGORY TO A DIFFERENT CATEGORY.

| SWITCHES INTO | NO. OF SWITCHES | % OF SWITCHES |
|---|---|---|
| TL | 27 | 20 |
| TQ | 12 | 9 |
| TR | 7 | 5 |
| SR | 6 | 4 |
| SV | 46 | 34 |
| S | 12 | 9 |
| X | 25 | 19 |
| TOTAL | 135 | |

2) Analysis of the Talk in Twenty Groups

Twenty teaching groups were analysed in detail by the research methods described in Chapter Three and illustrated in the preceding section of this chapter. In this way the lecturer talk and student talk in classes drawn from six Faculties were measured and the patterns of interaction between students and lecturers, and between students and students identified. The Faculties were represented as follows:

| | |
|---|---|
| Applied Science Classes | - Mechanical Engineering |
| | - Production Engineering* |
| | - Production Management |
| Arts Classes | - French (Literature) |
| | - German (Language) |
| | - German (Literature) |
| | - History |
| | - Spanish (Literature) |
| Education Classes | - Education Theory* |
| | - Education Method (Russian) |
| Medicine Classes | - Human Morphology |
| | - Physiology (Case Studies) |
| | - Physiology (Presentations) |
| Pure Science Classes | - Physics |
| | - Physics (Electronics) |
| | - Zoology |
| Social Sciences Classes | - Applied Social Science |
| | - Industrial Economics |

* denotes classes which were video-recorded on *two* occasions.

The smallest group to be video-recorded and analysed had three participants - one lecturer and two students; and the largest group contained seventeen participants, including one lecturer. A variety of Undergraduate Years of students were sampled - from Year One to Year Four, and groups of Postgraduates in Education were included. Three of the classes in the sample were led by two lecturers rather than one. All classes had a lecturer - there

were no tutorless groups in the sample. The lecturers ranged in status from newly appointed through to Professor.

The following two tables (Table 6.1 and Table 6.2) represent the findings of amounts of talk after the interaction analysis and computer analysis of the data. In Table 6.1 the information given is - the subject areas in alphabetical order, the numbers in the group (with student numbers first, followed by staff numbers), the percentage of the total class time spent in lecturer explanation and narration, the percentage of lecturer questioning and the percentage of lecturer responding to student comment. Also added in this table is the percentage amount of unclassifiable activity (as explained in Chapter Three and Appendix Three) and finally the *total* percentage of lecturer talk during the session.

Table 6.2 gives the subject area, the year of the students, the percentage amount of student responses to lecturer comment, the percentage amount of student volunteered talk (as defined in Chapter Three and Appendix Three). The final two columns register the percentage of silence during the class and the total percentage of student verbal contribution.

Observations and Commentary

[1] **Students do not participate greatly in small groups. Lecturers talk for much of the time.**

An examination of the total amounts of lecturer and student talk across the groups reveals that in only six of the classes did the students involve themselves verbally for more than 50% of the total teaching time of the class. These six classes represent only four groups, since two of the classes were the two which were video-recorded twice, in order to sample the consistency of the teaching and the findings. The averages of total lecturer talk and student talk across the twenty groups are:

| | | |
|---|---|---|
| Average of total lecturer talk | = | 60.55% |
| Average of total student talk | = | 33.25% |

In only 22% of the sample groups did students talk for more than half the time. Studies of classroom behaviour at primary and secondary levels of education have shown that teachers talk on average for over 60% of the class time. Resnick (1972) observed teaching behaviour in primary classrooms and found that the teachers contributed two thirds of the classroom talk. Flanders (1970), in his observation work in secondary classrooms also found an average percentage of teacher input exceeding 60%. It is perhaps even more questionable that an average total percentage of approximately 61% of lecturer talk should

## TABLE 6.1

## Lecturer Talk in Twenty Classes

| Group | Subject Area | Numbers | TL | TQ | TR | X | Total TT |
|---|---|---|---|---|---|---|---|
| 1 | Applied Social Science | 7 + 1 | 52% | 11% | 17% | 1% | 80% |
| 2 | Education (Method) | 4 + 1 | 76% | 6% | 6% | 1% | 88% |
| *3 | Education (Theory) | 7 + 1 | 7% | 2% | 21% | 3% | 30% |
| *4 | Education (Theory) | 9 + 1 | 14% | 2% | 14% | 2% | 30% |
| 5 | French (Literature) | 7 + 1 | 49% | 7% | 9% | 3% | 65% |
| 6 | German (Language) | 16 + 1 | 38% | 18% | 14% | 3% | 70% |
| 7 | German (Literature) | 11 + 1 | 37% | 4% | 10% | 1% | 52% |
| 8 | History | 2 + 1 | 62% | 1% | 11% | 1% | 74% |
| 9 | Human Morphology | 4 + 1 | 68% | 6% | 10% | 1% | 84% |
| 10 | Industrial Economics | 3 + 1 | 42% | 14% | 15% | 0% | 71% |
| 11 | Mechanical Engineering | 4 + 1 | 77% | 3% | 5% | 4% | 85% |
| 12 | Physics | 3 + 1 | 21% | 6 % | 6% | 3% | 33% |
| 13 | Physics (Electronics) | 4 + 1 | 46% | 12% | 3% | 12% | 61% |
| 14 | Physiology (Case Studies) | 6 + 1 | 19% | 13% | 28% | 2% | 60% |
| 15 | Phsiology (Presentations) | 8 + 1 | 18% | 14% | 26% | 1% | 58% |
| *16 | Production Engineering | 9 + 2 | 22% | 14% | 10% | 2% | 46% |
| *17 | Production Engineering | 10 + 2 | 30% | 7% | 11% | 1% | 48% |
| 18 | Production Management | 15 + 2 | 29% | 2% | 3% | 7% | 34% |
| 19 | Spanish (Literature) | 6 + 1 | 57% | 10% | 8% | 1% | 75% |
| 20 | Zoology | 4 + 1 | 49% | 13% | 5% | 0% | 67% |

* denotes classes video-recorded twice.

# TABLE 6.2

## Student Talk in the Twenty Classes

| Group | Subject Area | Year | SR | SV | S | Total ST |
|---|---|---|---|---|---|---|
| 1 | Applied Social Science | First | 9% | 3% | 8% | 12% |
| 2 | Education (Method) | Postgrad. | 5% | 3% | 4% | 8% |
| *3 | Education (Theory) | Postgrad. | 4% | 60% | 3% | 64% |
| *4 | Education (Theory) | Postgrad. | 7% | 61% | 1% | 68% |
| 5 | French (Literature) | Second | 18% | 10% | 4% | 28% |
| 6 | German (Language) | First | 14% | 1% | 11% | 15% |
| 7 | German (Literature) | Third | 7% | 35% | 5% | 42% |
| 8 | History | Third | 1% | 22% | 2% | 23% |
| 9 | Human Morphology | Second | 5% | 9% | 2% | 14% |
| 10 | Industrial Economics | Second | 18% | 7% | 4% | 25% |
| 11 | Mechanical Engineering | Second | 2% | 8% | 1% | 10% |
| 12 | Physics | Third | 8% | 52% | 3% | 60% |
| 13 | Physics (Electronics) | First | 11% | 14% | 2% | 25% |
| 14 | Physiology (Case Study) | First | 11% | 23% | 4% | 34% |
| 15 | Physiology (Presentations) | First | 10% | 27% | 4% | 37% |
| *16 | Production Engineering | Third | 20% | 31% | 1% | 51% |
| *17 | Production Engineering | Third | 14% | 36% | 1% | 50% |
| 18 | Production Management | First | 1% | 56% | 2% | 57% |
| 19 | Spanish (Literature) | First | 7% | 6% | 10% | 13% |
| 20 | Zoology | First | 9% | 21% | 3% | 30% |

* denotes classes video-recorded twice.

be found in higher education in a teaching medium which is expressly devoted to the enabling of student participation.

**[2] Variations in total amounts of student and lecturer talk show no relationship to the academic disciplines represented.**

As indicated in Figure 4.2 in Chapter Four assumptions are made about teaching styles within academic disciplines. The results of the analysis of talk across these twenty groups underline the falseness of those assumptions. The most striking examples to illustrate this are within the areas of Engineering, traditionally perceived as an area of much didactic teaching and the field of Education, a Social Science subject, where a more participative and collaborative mode might be expected. An examination of Tables 6.1 and 6.2 indicates that those two areas give us examples of both the most and the least amounts of lecturer input. The Education (Theory) class (video-recorded twice) has on each occasion 30% of total lecturer talk whereas the other Education class has the largest amount of lecturer talk in the whole sample - 88%. Similarly in Engineering, the Production Management class has 34% lecturer talk (the second lowest amount in the sample) and by contrast the Mechanical Engineering group has the second highest amount of lecturer input with 85%. In this study of small group teaching there appears to be no correlation between subject area and teaching style.

**[3] Lecturers do lecture, explain, narrate more than any other single activity in the groups.**

In Chapter Four the aims and expectations of lecturers in small groups were presented and analysed. This analysis revealed their primary aims of clarification, identification of difficulties and encouragement of student involvement in learning. When the nature of lecturer input to the twenty classes within the sample is examined closely, it becomes evident that there is a gap between intentions and practice, and/or possibly between the perceptions and the actuality of that practice. Were the lecturers intent in the classes on clarifying, identifying and enabling, high percentages of the lecturer talk would be anticipated under TQ (lecturer questions) and TR (lecturer responds to students questions or comments). In fact, the average percentages of lecturer talk across the twenty groups break down as follows:

TL = 41%
TQ = 8%
TR = 12%

There will be times in seminars and tutorials, when the lecturer identifies a problem area or a lacuna in the students' knowledge, which requires an explanation - sometimes an extended one. It would be expected, however, in participative small group work, which is the intended nature of these twenty classes, according to the outlined aims of the lecturers, that much of such necessary explanation would be initiated by a student enquiry or comment, and would, therefore, be identified by the analysis procedures used, as TR. The above percentages patently indicate that this is often not the case. Similarly a higher percentage of TQ might be expected, if lecturers were seeking either to find areas in need of clarification or to involve the students in discussion. This is also not the case according to the figures above. The amount of TQ is very low, at an average of 8% of the total activity of the classes. Since lecturer questioning was also emphasised by the students in their comments referred to in Chapter Five, as a problem area, this category will be examined in some detail in the next section. The categories of TL and TR will be focused on here.

In all but four of the groups listed in Table 6.1 the lecturer talk is predominantly lecturing and explaining. The differential input can be as high as the following:

| | | | | |
|---|---|---|---|---|
| Group 2 | | Total | TT | = 88% |
| | of that | | TL | = 76% |
| | | | TQ | = 6% |
| | | | TR | = 6% |
| Group 11 | | Total | TT | = 85% |
| | of that | | TL | = 77% |
| | | | TQ | = 3% |
| | | | TR | = 5% |

From these figures it can be seen that the predominant activity in the classes is lecturing, although both classes are small, each containing four students and one lecturer. In other groups the differential between amounts of explanation and of questioning and response is considerable, if not as great as those illustrated above.

Four of the groups are noteworthy since they contain either more TR than TL or the same. Two of these classes are the same Education group recorded twice.

| | | | | |
|---|---|---|---|---|
| Group 3 | | Total | TT | = 30% |
| | of that | | TL | = 7% |
| | | | TQ | = 2% |
| | | | TR | = 21% |

| | | | | |
|---|---|---|---|---|
| Group 4 | | Total | TT | = 30% |
| | of that | | TL | = 14% |
| | | | TQ | = 2% |
| | | | TR | = 14% |

In both samples of the above group in session the lecturer input remains constant, but the nature of that talk varies. The amount of questioning stays the same in both but the lecturer response in the first example is threefold that of narration and explanation, whereas the two categories are exactly the same in the second. However, the crucial point to emphasise is that, compared with the majority of the other classes in the sample of twenty, the lecturing and explaining category is relatively very low and is outweighed by the response category.

Equally striking in this context are Groups 14 and 15. Both are first year classes in Physiology and are conducted by lecturers, who work in close collaboration with each other. This point has been noted already in Chapter Four. Although the total amounts of lecturer talk in both groups are not significantly low, the nature of the talk in each is particularly significant when compared with the other groups.

| | | | | |
|---|---|---|---|---|
| Group 14 | | Total | TT | = 60% |
| | of that | | TL | = 19% |
| | | | TQ | = 13% |
| | | | TR | = 28% |

| | | | | |
|---|---|---|---|---|
| Group 15 | | Total | TT | = 58% |
| | of that | | TL | = 18% |
| | | | TQ | = 14% |
| | | | TR | = 26% |

The noteworthy features of the above are:

a) the remarkable similarity in percentages across the categories.

b) the comparative amount of TR in relationship to TL.

c) the relatively low percentage of TL to the total amount of TT.

If the categories TQ and TR are added together for the two Physiology groups we get the comparative figures of:

TQ + TR = 41%; TL = 19% in Group 14

TQ + TR = 40%; TL = 18% in Group 15

In both cases TL makes up less than 20% of the total activity of the session, which are the third and fourth lowest amounts of this category of activity within the sample. Only one other group has a lower amount of explanation and lecture than these two. These two lecturers then are evidently achieving the stated aims in Chapter Four of clarification, identification and facilitation by acting primarily in response to students and by involving them through a relatively high percentage of questioning compared with their colleagues in the other classes in the sample. Only one other group in the sample has a higher percentage of time devoted to questioning.

The above four groups are then anomalies in a pattern across the sample of lecturer talk being dominated by the activity of lecturing and explaining. Despite the stated aims to the contrary and despite the small numbers within the classes, the prevalent activity is one which could equally occur with ten times the number in the classroom and would, in that case, be far more cost-effective.

**[4] There is little lecturer questioning, and of that only 20% elicits analysis or evaluation.**

The detailed analysis of the nature and patterns of talk in the twenty groups revealed a very low percentage, 8%, of time spent in lecturer questioning. Two of the major stated objectives on the lecturers' comment sheets were those of enabling student participation and the identification of individual students' learning gaps. These might lead one to expect a higher level of questioning than actually occurred. The unexpectedly low amount of questions provoked the interest of the researcher to identify more closely the nature of that questioning in a sample of eight of the classes. The students had also highlighted questioning as a problematical area in their comments on small group teaching, which pointed to a further need for the analysis of a sample of questions. The following eight classes were selected for detailed examination of all the questions within the teaching session with the use of the schedule described in Chapter Three and included as Appendix Six.

| Group | Amount of TQ | Subject Area | Year |
|---|---|---|---|
| Group 1 | 11% | Applied Social Science | 1st Year |
| Group 2 | 6% | Education (Method) | Postgrad. |
| Group 5 | 7% | French (Literature) | 2nd Year |
| Group 6 | 18% | German (Language) | 1st Year |
| Group 13 | 12% | Physics (Electronics) | 1st Year |
| Group 14 | 13% | Physiology (Case Studies) | 1st Year |
| Group 16 | 14% | Production Engineering | 3rd Year |
| Group 19 | 10% | Spanish (Literature) | 1st Year |

The criteria for the selection of these eight groups for detailed analysis of their questions were:

(a) to provide a range of academic disciplines in the sample.

(b) to review proportionately more Arts subject classes, particularly literature, since this area might present a higher number of questions forcing interpretation and analysis.

(c) to sample questioning across the year groupings ie first, second, third and postgraduate students were represented.

(d) within the above criteria, to examine closely those groups with a comparatively high amount of TQ.

The first point to note is that the percentages of lecturer questioning are low compared with other categories of activity. The nature of the questions were then considered in close detail using the schedule (Appendix Six) and the accompanying explanation of it (in Chapter Three). A categorisation of each of the lecturer questions posed in all of the eight selected groups revealed the following average percentages of the six categories of questions.

| Question Type | Average Percentage |
|---|---|
| Administrative/Socialising | 17% |
| Information Recall | 27% |
| Speculative | 10% |
| Problem Solving | 4% |
| Analytical/Evaluative | 20% |
| Probe | 22% |

When we take into account the nature of the sample, which includes a disproportionately high amount of questions from Arts/Literature areas, the average percentage of questions eliciting analysis and evaluation is surprisingly low. According to this sample the questions posed in small groups in only 20% of cases cause the students to analyse and/or evaluate a situation, event, problem or issue. There was variation across the examples in the sample. The variations for Category Five (Analytical/Evaluative) were as follows:

| Group | Subject Area | Amount of Category Five |
|---|---|---|
| Group 1 | Applied Social Science | 23% |
| Group 2 | Education | 25% |
| Group 5 | French | 37% |
| Group 6 | German | 10% |
| Group 13 | Physics | 3% |
| Group 14 | Physiology | 10% |
| Group 16 | Production Engineering | 11% |
| Group 19 | Spanish | 42% |

From the above variations it can be seen that comparatively high levels of Category Five questions were to be found in the Literature classes and the Education and Social Science groups. The subject areas, which fell below the calculated mean of 20% were the Science areas of Physics, Physiology and Production Engineering and the Language class in German.

By contrast the amounts of information recall questions (Category Two) across the selected groups are significantly higher.

| Group | Subject Area | Category Two |
|---|---|---|
| Group 1 | Applied Social Science | 41% |
| Group 2 | Education | 15% |
| Group 5 | French | 41% |
| Group 6 | German | 32% |
| Group 13 | Physics | 31% |
| Group 14 | Physiology | 35% |
| Group 16 | Production Engineering | 17% |
| Group 19 | Spanish | 22% |

The recall of information by the students is elicited by approximately one third or more of the lecturer questions in five of the eight groups. Two of the classes, which had relatively high percentages of Category Five questions - Applied Social Science and French

Literature - also contained an even higher level of Category Two types, both at 41%. The German Language, Physics and Physiology classes, which presented low amounts of Category Five, presented correspondingly high amounts of Category Two questions. The three remaining groups had lower amounts of information recall questions, but the percentages are not nearly so low as those recorded for the smallest levels of analytical/evaluative questions, presented in the previous table concerning Category Five questions. The average amount of Category Two questions across the eight groups was 27%, significantly higher than the recorded amount for any other category of question type. Questions which require application of the information recalled either by encouraging speculation in the light of that data or problem-solving by using, it had a relatively low total count across the classes sampled. The average percentages of speculative and problem-solving questions were 10% and 4% respectively. The only significant amounts of problem-solving (Category Four) questions were to be found in the German Language group and the Physics group, which had respective totals of 14% and 15%. The amounts in the other six groups of this category were negligible, if any. Of the Category Three questions (those eliciting a speculative response), most were evident in four of the groups as follows: Applied Social Science contained 18%, Education 23%, Physiology 9% and Production Engineering 24%. The other four groups again had either negligible or no Category Three questions. Whereas it was predictable that the Category Four questions (problem-solving) might fall in the two most clearly problem oriented classes (ie the Physics (Electronics) class concerned a large amount of equation solving and the German Language class was a translation session involving the solution of language problems), the incidence of Category Three questions appears to follow no anticipated or assumed pattern.

The two other remaining categories of questions - One and Six - presented unexpectedly and surprisingly high average amounts. The average percentage of administrative/socialising questions was 17% and probe questions amounted to an average of 21%, the second largest average in the sample. With reference to Category One questions, lecturers in this sample spent more time engaged in procedural and social questioning than they did in questions designed to lead students to apply the knowledge they had gained either in speculation or in problem-solving; and almost as much time was spent in Category One questioning as was given to eliciting analysis and evaluation. The relative average percentages of the above-mentioned categories across the sample were as follows:

| | | |
|---|---|---|
| Category One | (Administrative/Socialising) | 17% |
| Total of Categories Three and Four | (Speculative/Problem-Solving) | 14% |
| Category Five | (Analytical/Evaluative) | 20% |

Finally, by far the most striking and interesting category of question was Category Six, the probe question. As indicated in Chapter Three these were additional questions to the lecturers initial one and could be located along a spectrum from simple repetition of the initial question because of lack of or incorrect student response, through modification of that question for the same reasons, to a different question following on from the original one and forcing the students to explore further their knowledge and ideas, to extend their response. This category of question was the second most prevalent type in the sample, second only to information recall questions.

> "To know how to put a good question is to have gone a long way towards becoming a skilful and efficient instructor."

So wrote Fitch as long ago as 1881. The students in their responses on the comment sheets identified questioning as an area for improvement in lecturers' skills. The prominence of Category Six questions in this survey indicates the need for practice and improvement in questioning technique. Although in some cases in the sample, notably the Physiology seminar, probe questions were used skilfully to encourage deep exploration and consideration by the students, their high incidence indicates largely ineffective, inadequately worded initial questions, which needed repetition or clarification. Commonplace also were questions, which by their very wording elicited either "Yes" or "No" as a response, and required therefore subsequent questioning. *Closed* questions of all varieties, including "Yes/No", single word or phrase responses etc. were much more frequent than more open questions requiring thought and some initiative in the response. The incidence of Category Six questions, ie largely repeat questions was comparatively high across the total sample as follows:

| Group | Subject Area | Category Six |
|---|---|---|
| Group 1 | Applied Social Science | 14% |
| Group 2 | Education | 23% |
| Group 5 | French | 19% |
| Group 6 | German | 31% |
| Group 13 | Physics | 16% |
| Group 14 | Physiology | 23% |
| Group 16 | Production Engineering | 31% |
| Group 19 | Spanish | 12% |

There is no doubt that Category Six, probing questions, are of great value, if used in the way demonstrated in the following extract from the Physiology seminar.

> "We've had quite a bit of stuff so far - anybody got any questions? (Lecturer)
>
> *Well, I want to know why is he barely conscious? I mean what is actually making him so? Is it lack of oxygen to his brain that's doing that? (Student)*
>
> Well - what's critical about the systolic pressure of 60 mm of mercury? (Lecturer)
>
> (Short silence)
>
> Why do you think I picked that? (Lecturer)
>
> (Short silence)
>
> Is there a significant difference between 55 and 65? (Lecturer)
>
> *Is one virtually dead? (Student)*
>
> Virtually dead is a term I don't think we'd like to use. There's an element of defeatism in it! Alright why? (Lecturer)
>
> *Is it non-perfusion of the vital organs. (Student)*
>
> Which vital organs? (Lecturer)
>
> *The brain, I think. (Student)*
>
> Yes, that's right ... (summary of point). (Lecturer)."

The above sequence of questions is interesting in that it begins with an open question designed to give students an opportunity to clarify their understanding. At this point the student comes in very quickly to check out her understanding and poses her particular problem with the case. Instead of responding with an explanation, the lecturer adds another question and continues with this questioning progression until the students themselves have arrived at the correct understanding by being forced through particular thought processes. They are thus actively involved in thinking their way through the problem and arriving at the conclusion, which the lecturer then succinctly summarises. By this technique of questioning and method of active learning the *understanding* of the students is more likely to be developed rather than the mere transmission of information, which might otherwise be forgotten. The one redundant question in an otherwise effective series of probe questions is the third one - "Why do you think I picked that?" That one might have more appropriately been bye-passed, but the lecturer very quickly moved on to a more productive re-formulation of it.

The above analysis of probe questioning technique reveals an appropriate and valuable use of probe questions - a succession of different questions in a logical progression. Within the sample such examples of probing were rare. A probe question was most commonly a repeat or reformulation of an initial confusingly or narrowly presented question. The data does suggest, along with the students own comments that there is room for improvement and practice by lecturers in this important skill area, most particularly in the following areas:

(a) the formulation and presentation of questions, to make them more open, understandable and encouraging,

(b) the effective use of probe questions, to force deeper thought and active learning.

(c) higher amounts of questions, which encourage application of recalled information, and analysis and evaluation of ideas and issues.

Thus far in this chapter the observations, commentary and analysis of the data in Tables 6.1 and 6.2 has focused on the amounts and types of lecturer talk. The detailed consideration of student talk is contained in the next chapter, when those groups are examined in depth, which exhibited comparatively large amounts of student input. Before that there are two further observations to be made of a general nature about the data.

**[5] Size of group does not relate to the talk patterns in any significant way.**

As previously explained the groups in this sample ranged in size between three and seventeen, including the lecturers. In the table below two of the smallest groups and two of the largest groups are compared as examples.

| Group | Subject | Number | TT | ST |
|---|---|---|---|---|
| 12 | Physics | 4 | 33% | 60% |
| 2 | Education | 5 | 88% | 8% |
| 18 | Production Management | 17 | 34% | 57% |
| 6 | German | 17 | 70% | 15% |

Above are samples of four groups drawn from the Arts, Sciences (Applied and Pure) and Social Sciences, compared and contrasted in pairs to illustrate that within very small and within large groups variations in amount of lecturer and student talk are considerable. In addition, it is interesting to note that in these two pairs the Arts and Social Science (Education) subjects have the small amounts of student talk and the two Science groups, Pure and Applied, have the greater input from students. Also noteworthy is the fact that within each pair the groups were composed of a similar level (ie Year Group) of students.

The second pair - Production Management and German - contained first-year students and the first pair - Physics and Education - consisted of third year students in Physics and postgraduate students in Education. Despite the similarity of level and experience of students the contrast in talk patterns is considerable between the groups.

[6] **There is a correlation between amount of student talk and level (Year Group) and experience of the students.**

The Education group illustrated in the previous section was one of the only two *advanced* (ie third year or beyond) groups, in which the amount of student talk fell below 50% of the total seminar activities. Of the sample of twenty groups, eight were drawn from the levels of final year or postgraduate. As can be seen from the Tables these eight groups were drawn from the Applied Sciences, the Arts, Education and Pure Science, and consisted of classes in:

Education (Method)
(2) Education (Theory)
German (Literature)
History
Physics
(2) Production Engineering

Of these eight classes, five of them were drawn from that group of six classes within the sample, in which the amount of lecturer talk was very low. These were the classes in Education (Theory), Physics and Production Engineering. In the class in German (Literature), although the lecturer input did exceed 50% (ie amounted to 52%), the students did participate comparatively more than in other groups. As indicated in section [1] above, the average amount of student talk per class across the sample was 33.25%, whereas the amount in this third year German (Literature) class was 8.75% above that mean at 42%. Therefore, the only two third-year classes which had relatively low student input within the sample were the ones in Education (Method) and History.

There is a notable increase in the amount of student talk in groups drawn from the final year and postgraduate courses compared with that in the first and second years. From Table 6.2 it can be seen that the average amount of student input across the twelve groups consisting of first and second year students was 25%. Compared with that the average level of student talk in the other eight groups amounted to the considerably higher percentage of 45.75%.

3) Summary of Observations

The following have been then the principal observations drawn from the analysis:

i) **Students do not participate greatly in small groups. Lecturers talk for much of the time;**

ii) **Variations in total amounts of student and lecturer talk show no relationship to the academic disciplines respresented;**

iii) **Lecturers do lecture, explain, narrate more than any other single activity in the groups;**

iv) **There is very little lecturer questioning, and of that only 20% elicits analysis or evaluation;**

v) **Size of group does not relate to the talk patterns in any significant way;**

vi) **There is a correlation between amount of student talk and level (Year Group) and experience of the students.**

In Chapter Five, students' estimates of their contact time spent in small groups indicated an increase in their experience of small group work in their third year, which might account for an increase in confidence in themselves or in their knowledge of the subject, which enables them to contribute and participate more readily. It could also be the case that lecturers expect a higher level of contribution from final year and postgraduate students, and so one of higher education's many self-fulfilling prophecies is being witnessed here. A further explanation might be that the imminent degree examinations or certificate qualifications exact a pressure on students to ask questions and to fill the gaps in their knowledge. The above reasons are speculative and the data does not permit a determination of the precise cause of the increase at this level in student participation. Another explanation may be that it is the teaching style of the lecturers and/or the particular methodologies chosen for these groups which is influential in involving the students more. In the following chapter the six classes with a comparatively high level of student contribution are analysed in detail, in order that the nature of that contribution and possible reasons for it, might be explored more fully. Given the lecturers' expressed aims and expectations in Chapter Four, it is in the interests of the improvement of teaching and learning in small groups in higher education, that the ways of involving students more fully in the learning process be identified. Through this identification it might then be possible to extend higher levels of student participation to first and second year classes. In this way the student, whose quoted words formed the introduction to this chapter, and his counterparts in subsequent years might be prevented from suffering the same sense of disillusionment about a teaching activity, which they anticipate with optimism and enthusiasm.

# CHAPTER SEVEN

# A DETAILED EXAMINATION OF THE NATURE AND PATTERN OF STUDENT TALK IN THE SAMPLE

## Introduction

> "The only privilege a student had that was worth his claiming, was that of talking to the professor, and the professor was bound to encourage it. His only difficulty on that side was to get them to talk at all. He had to devise schemes to find what they were thinking about, and induce them to risk criticism from their fellows."
>
> (The Education of Henry Adams)

The difficulty, alluded to above, which the professor had, is clearly reflected in our sampling of the talk on small group teaching. Table 6.2 demonstrates this difficulty by indicating less then 50% of student talk in fourteen out of the twenty classes in the sample. Of these fourteen, nine groups contained 25% or less of student contribution, and the remaining five ranged between 28% and 42%. It is intended in this chapter to focus primarily on the other six classes, which represent four groups, since two groups were video-recorded twice.

## Analysis of Table 6.2 - Student Talk in the Twenty Groups

Firstly, however, Table 6.2, which gives a breakdown of the amounts of student response talk and student volunteering, will be examined more closely. If the average across the sample of twenty groups of each type of talk, is calculated, the results indicate a predominance of student volunteered talk.

| | | |
|---|---|---|
| Average percentage SR | = | 9% |
| Average percentage SV | = | 24% |
| Average total of ST | = | 33% |

These averages would appear to indicate that, despite the low total average of student input across the groups, the largest part of that talk is actually initiated by students, rather than consisting merely of students' responses to lecturers' enquiries. When the total table is examined, however, we can see clearly that this average SV of 24% does not reflect a consistent pattern of predominant volunteered student talk throughout the sample. The high differential between the average SV and SR totals is attributable to comparatively very large amounts of SV talk in four of the groups, each of which contains over 50% of SV talk alone and exceptionally little SR talk.

| Group | Subject Area | SV Total % |
|---|---|---|
| 3 | Education | 60% |
| 4 | Education | 61% |
| 12 | Physics | 52% |
| 18 | Production Management | 56% |

A more detailed analysis of the nature of this SV input follows in the case studies of those groups.

Of the remaining classes in the sample, six contain a higher amount of SR than SV and ten have more SV than SR. In many cases, however, as can be seen from Table 6.2 the percentages are either so similar in each category or the total student talk so low in any case, as to make the differences of negligible significance. Other groups with a proportionately high amount of SV, let us say circa one quarter of the class or more are the following:

| Group | Subject Area | SV Total % |
|---|---|---|
| 7 | German (Literature) | 35% |
| 14 | Physiology | 23% |
| 15 | Physiology | 27% |
| 16 | Production Engineering | 31% |
| 17 | Production Engineering | 36% |

With the exception of the Physiology groups the above five groups are made up of final year students; and in the previous list all but one of the groups - the Production Management group - consisted either of third year students or postgraduate. Thus one identifiable variable associated with increased student volunteered talk is the age and experience level of the students. However, we still have our three first year groups:

Group 14 Physiology
Group 15 Physiology
Group 18 Production Management

all with comparatively high student input scores. There must be other aspects of those groups and their processes, which contribute to these results.

1) The Significance of Preparation

In the quotation at the beginning of this chapter, the writer alluded in the second part of it to the professor "devising schemes to find out what they were thinking about." When we look at the *schemes* devised or in other words the methodologies used within the nine

groups identified in the above two lists, one significant and striking feature about them all is that, in contrast to *all* the other eleven groups, these classes did have methodologies, which had been clearly defined with for the students beforehand. All nine classes had previously determined the structure and had been prepared for by either one or more of the students. When the other eleven groups are closely scrutinised it becomes apparent that not one of them had required student preparation or had any clearly enunciated structure. The eleven groups with the lowest amount of SV talk fell into the following categories:

(i) Follow-up classes to lectures, where students were expected to raise difficulties and clarify their understanding of topics. All examples from the sample in this category were unstructured and unprepared.

(ii) Classes, when students were working with lectures on problems, mathematical, statistical or otherwise. Again these were all carried out without any previously identified structure or preparation.

(iii) Groups concerned with working from texts - historical, literary and language (translation) texts. In the case of the literary and language texts, the material was handed out for the first time at the session recorded. The historical textual study class was based on a longer text, of which the students had their own copies. They might have prepared for it, but that would have been at their discretion. No structured preparation or input for the class had been defined.

To return to the nine classes with higher SV talk, each one had a clear and previously determined structure, although in each case the lecturers had been responsible for its determination. The students had known exactly what they had been expected to prepare well in advance. They varied from the traditional seminar paper structure to the more progressive methodology of role-play as follows:

| Group | Subject Area | | Structure |
|---|---|---|---|
| 3 | Education (Theory) | ] | On each of the two occasions this group was recorded, four of its members had been asked to prepare short inputs of circa 10 minutes. |
| 4 | Education (Theory) | ] | |
| 7 | German (Literature) | | Traditional seminar. One person presenting paper. |

| | | |
|---|---|---|
| 12 | Physics | Traditional seminar. One person presenting a paper. |
| 14 | Physiology | Three case studies prepared by three students and presented to the rest |
| 15 | Physiology | Presentations, when two students were presenting formally the results of an experiment to the rest. |
| 16 | Production Engineering | Role-play involving all the students in the group in prepared roles. |
| 17 | Production Engineering | Role-play involving all the students in the group in prepared roles. |
| 18 | Production Management | Role-play involving all the students in the group. The roles were not prepared beforehand, but the structure of the session had been explained in detail the week before. |

2) The Effect of Methodology and Structure

Amongst the groups identified with a relatively high level of SV talk two features have thus far been isolated: the state of preparedness and the study experience of students. If we focus on the latter of those two features, it can be seen that, although the majority of the groups with a greater amount of student talk (and within that a comparatively high proportion of volunteered input) consist of final year or postgraduate students, three of the classes are drawn from the first year, ie the two Physiology groups and the one in Production Management. A comparison of the processes within these three first year groups and the other first year classes within the sample reveals firstly that preparation had been required of the students in these three groups only, but secondly and equally interestingly that the teaching methodologies used within these three classes were unusual within the sample and in each case very carefully and systematically structured. In the case of the Production Management class, which contained 56% SV talk and 1% SR talk, the session took the form of a role-play, ie structured active involvement of all the students in a management task. The two Physiology groups met also with specific pre-prepared tasks. Group 14's class consisted of three students discussing previously analysed case studies of patients in Casualty. The intention was then for the rest of the group to discuss the suggestions concerning diagnosis, prognosis and treatment of the three students. Group 15's session was organised around two individual presentations of results by two students to the rest of the group. Once again discussion by the group of the findings presented was intended.

As can be seen from the above descriptions each of the small group sessions had a distinctive methodology - role-play, case study and presentation - and each a definite structure, made clear to the students both beforehand and during the class. The fact that these three groups stand in contrast in the amounts of student talk to the other first year classes within the sample appears to indicate that clarity of methodology and structure in the minds of all participants - lecturers and students alike - is a factor in enabling students to be more involved in the group processes and thereby in their own learning development. It is evidently possible then for lecturers to facilitate increased participation by students and consequently more co-operative learning, if they do carefully *devise schemes* as suggested in the beginning quotation to this chapter and as evidenced by the methods used by the lecturers in the three classes in Physiology and Production Management, who increased the amount of student input in their sessions from an average of 25% for first and second year students across the sample to 34%, 37% and 57% respectively.

3) Collaboration in the Preparation and Execution of Teaching

In Chapters Four and Five the aim of collaborative learning in small groups was alluded to by only very few of the lecturer and student respondents to the comment sheets. Collaboration in the teaching processes did form one of the identifiable features of those few classes which had a comparatively high level of student participation. On close consideration of the nine group sessions in which more than one third of the talk was contributed by students, one further significant characteristic is that most of those were led by lecturers who were used to collaborating in the teaching process - in the preparatory stages and/or in the execution of their teaching Indeed three of the small group classes in the sample were actually taught by two lecturers. It is interesting to note that those three all fall within the group of classes with large amounts of student talk, ie Groups 16, 17 and 18 in Production Engineering and Production Management.

Further examination of the two classes with the highest amounts of student input (ie the two video recorded examples of the same Education (Theory) group of postgraduates) revealed that this group had on other occasions been used to operating with two lecturers. The lecturer in this case worked in close collaboration with colleagues in all areas of his teaching, and team teaching was a regular feature of his work. So, although in the case of the two examples in our study he was working alone, further observed examples at a later stage showed shared teaching.

In Chapter Four, the analysis of lecturers' aims, it has already been indicated that the two lecturers in Pharmacology and Physiology were used to frequent preparatory and evaluative discussions about their work. In fact, they had on occasions attended each others classes and did work closely with one another. As was stated in connection with the analysis of their aims, these collaborative processes were reflected in their statements on the

comments sheets. If can also be seen from the interaction analysis of the actual practice of their teaching that there is much similarity of approach.

It can thus be seen that the lecturers involved in seven out of the nine groups with high percentages of student talk are characterised by an open, analytical and collaborative approach to their teaching. The only two classes within the group of nine, which did not exhibit this feature were those in German (Literature) and Physics. When the lecturers in other groups within the sample were questioned about this aspect, it was found that all were used to working more in isolation, and there were no comparable examples of team teaching, joint preparation or shared evaluation and analysis. It is evident then that a third identifiable feature across the groups with high levels of student participation is lecturer experience of working collaboratively with one colleague or more in the development of teaching skills and technique.

4) Interaction between Students in Small Group Teaching

Thus far in this chapter the *amounts* of student talk and particularly of volunteered talk have formed the basis of the analysis. It is intended now to focus more closely on the nature of that student input in the four groups, in whose classes more than 50% of student talk was achieved. In Chapter Five, which concerned itself with the aims and expectations of students for their small group learning, much reference was made in student comment to the possibility of exchange of ideas, student participation and opportunities for interaction between students and lecturers and between the students themselves. Groups 3, 4, 12, 16, 17 and 18, which represent the work of four groups in the areas of Education, Physics, Production Engineering and Production Management, will now be considered in some detail, in order to examine the interaction patterns and the extent to which students do, in fact, have opportunities to learn through discussion amongst themselves.

By combining information culled from the histograms, the transition matrix and the switch matrix data, illustrated in the first part of Chapter Six, an analysis of the transitions into and from student volunteered and student response talk in the above groups indicates the patterns of interaction in the selected classes. In the two smaller groups with fewer than ten participants inclusive of lecturers, ie the Education and Physics groups each student could be readily identified and every student's SV and SR input was examined, to analyse the preceding and subsequent activities. In this way it could be seen whether, eg one dominant student interacted primarily with the lecturer or whether, eg there was significant student/student interaction. In the two larger groups - the Production Engineering and Production Management classes - it was more difficult to monitor the contributions of each individual student. It could be seen, nonetheless, from the data whether there were specific students who participated more than others, and between whom the transactions predominantly took place.

The detailed analysis of student talk patterns across the four groups revealed that, in two of them, contributions were spread more evenly across the student participants than in the other two. In the Education and Production Management classes, all students made some contribution and no student made significantly more than any other. If Group 3 is taken as an example of the Education (Theory) group's practice, the following details give the amounts of volunteered talk for each student and the percentage of the class, which that represents.

Nature of SV Talk in Group 3

Student 1 contributed 7 mins. 12 secs. = 11.94% of the class
Student 2 contributed 7 mins. 36 secs. = 12.60% of the class
Student 3 contributed 3 mins. 45 secs. = 6.22% of the class
Student 4 contributed 1 min. 45 secs. = 2.90% of the class
Student 5 contributed 4 mins. 36 secs. = 7.63% of the class
Student 6 contributed 7 mins. 3 secs. = 11 69% of the class
Student 7 contributed 3 mins. 15 secs. = 5.39% of the class

The results of the analysis show:

(a) that most students contributed substantially to the clas discussion,
(b) that there was variation in the amounts of student contribution, but
(c) that all students participated in the discussion.

When we look more closely at what activities precede and follow every SV input of each student, it is evident that the interaction was predominantly between the students themselves and not via the lecturer. If Student One's SV talk is analysed in this way it can be seen that he made *twenty-six* inputs of this kind. Of those *twenty-six* only *two* were preceded by lecturer talk, whereas *nineteen* were preceded by students talk and the other *five* by silence. The subsequent transition from Student One's SV was only *four* times into lecturer comment, but *nineteen* times into student talk by a variety of students and *three* times into silence. The SR input in this class forms only 4% of the total time and is again spread fairly evenly across the students. In this case TQ largely precipitates the responses, but they are usually followed by student talk.

The class in Production Management displays similar patterns of interaction, which indicate student interchange of ideas. Once again the student input was very largely SV rather than SR. Although having fifteen students in the group made it difficult to monitor exactly all the contributions of each, intensive viewing of the video-recording revealed no single dominant student and that all fifteen made some contribution. An examination of one student, in particular, shows that of his SV input much more was both preceded and

followed by student talk then by lecturer talk. Of the minimal amount of SR talk (ie 1% in all) the majority was prompted by lecturer questioning, but was followed by further student talk.

It can, therefore, be concluded from the data that these two groups *do* contain interaction between the students and their small group learning experience *does* fulfil the aims and expectations expressed by students in Chapter Five.

When the other two groups - one in Physics and the other in Production Engineering - are analysed in detail with specific reference to the student contributions, a different and contrasting picture emerges. The Physics class took the form of a traditional seminar, for which one student out of the three had prepared a paper. An analysis of the amount of SV talk contributed by this one student and of the transitions into and from his SV talk indicate clearly that

(a) he contributed far more than any of the other two students

(b) the interaction is very largely between him and the lecturer rather than with his peers.

Of the 52% of SV talk in the seminar this student contributed 48%, whereas Student Two had 4% of the input in this category and Student Three none at all. Student One's 48% of SV was made up of *fifty-one* inputs, of which *thirty-seven* were precipitated by lecturer questioning, *eight* were preceded by silence or unclassifiable activity and the remainder of *six* by comments from another student. Student One's SV was followed on *forty* occasions by lecturer talk, *six* times by silence and *five* times only by other student contributions. An examination of the SR talk also reveals a predominance of input by Student One in response in every case to questions posed by the teacher. The above results of the analysis indicate clearly then that the seminar took the form of a dialogue between the teacher and one student, who had prepared the seminar paper.

Detailed consideration of the two classes in Production Engineering demonstrates that on both occasions two students showed a tendency to dominate the session. When the SV input is analysed, which is both times considerably higher than SR contribution, the comparative amounts of talk by students are as follows.

<u>Nature of SV Talk in Group 16</u>

Student 1 contributed 9 mins. 9 secs. = 16.64% of the class

Student 2 contributed 6 mins. 0 secs. = 10.91% of the class

Total of other 7 students 2 mins. 0 secs. = 3.64% of the class

(ie the *average* SV contribution of the other seven students = 0.52% of the class).

Moreover, when the SV comments of Student One are examined, we find that there are *twenty-eight inputs of which nineteen are prompted by lecturer talk, four by silence or unclassifiable and five only by other student talk. The twenty-eight SV contributions of Student One lead in twenty-three times to lecturer talk, only four times to student talk and once to silence. Student Two also interacts predominantly with the lecturers rather than the students. The other relatively small amount of SV talk (3.64%) by the remaining students does however, show a majority of transactions between them and Students One and Two, rather than with the lecturers.*

The above analysis of the interaction patterns in Groups 12 and 16 indicates that any discussion there was was conducted largely via the lecturers and hardly at all between the students themselves directly. Indeed in the Physics group, the seminar for much of the time took the form of a dialogue between the student seminar leader and the teacher. These results demonstrate that in these two groups there was little interchange of ideas between students and that the expressed aims and expectations of discussion and exchange were not met.

5) Summary of the Analysis of Student Talk

From the analyses of student contributions across the sample of twenty classes and most particularly in those four groups with high amounts of student talk the following conclusions have been reached:

[1] **Contrary to their aims and expectations, students do not often interact with each other in instructional small groups.**

Only in two of the groups within the sample of twenty did students make a major contribution, of which the majority was spent in exchanging ideas with each other.

[2] **The age and experience level of students correlates with increased student participation in small groups.**

Of the classes with higher amounts of student talk, the majority consisted of final year students or postgraduates.

[3] **Preparation for classes leads to increased student contribution.**

In all cases within the sample when students had been required to prepare, a relatively high amount of student talk was achieved.

[4] **Methodology and structure influence the level of student involvement.**

Where a specific methodology had been chosen and the structure of the class was clear to the students the amount of their input increased.

[5] **Where lecturers collaborate in the preparation and execution of teaching, the small group work has higher amounts of student contribution.**

In the majority of classes with comparatively more student talk, the lecturers involved were practised in working in teams or pairs on their teaching.

# CHAPTER EIGHT

# AN EXAMINATION OF THE CURRENT CLIMATE AND CONTEXT IN UNIVERSITIES. ARE THEY CONDUCIVE TO THE IMPROVEMENT OF TEACHING?

## 1) The Need for Development of Teaching Skills

> "There could have been more ... (interaction between students) ..., but I think I spoiled it sometimes by interrupting."

This quotation taken from one of the Lecturers' Comment Sheets (Section Five(f): **How satisfied were you with the amount of interaction between the students themselves?**) identifies one lecturer's realisation of an area of inadequacy in his small group teaching technique. For the most part lecturers' comments in this section, which focused on degree of satisfaction with student participation, indicated that most of the sample of lecturers felt between moderately satisfied and well pleased with the amount, nature and quality of student contribution in the classes recorded for the study. There were very few comments indeed in that section, which suggested an awareness of dominance or of the paucity of student input and dirth of interaction between the students themselves.

A subsequent experiment was tried with five of the lecturers, who had taken part in the project, and the results of that were of considerable interest in connection with lecturers' awareness and perceptions of their teaching practice. These five lecturers, all drawn from Arts disciplines, were invited to review and analyse the recording of their class, together with the participating students, if they wished. Three of the five opted to share the analysis with the students. In those three cases, therefore, a process of triangulation took place between researcher, teacher and learners in the critical analysis of the processes. The most significant outcome of this phase, when stimulated-recall techniques were used by introducing sections of the video-recording and looking at specific teaching skills, eg questioning, was the change in the perceptions and the awareness of the lecturers concerned, about their small group practice and technique. Focusing on particular aspects in collaboration with their students enabled them to increase their awareness of the need for refinement and development of certain skills. All of the lecturers in this small sample of five felt that their perceptions had altered, that their statement of aims prior to the recording had not been met nearly so fully as they had thought immediately after the class. Additionally all expressed a desire to use, at regular intervals, the triangulation technique of analysis of their teaching performance, based on current video-recording of their practice.

The above experiment revealed then, in all five cases, a mismatch in those lecturers' perceptions of:

a) what they were aiming to achieve,

b) what they subsequently thought they had achieved,

c) what they later recognised, via detailed collaborative analysis, their performance had actually been.

A technique, new to these lecturers in higher education had thus been developed, to help them increase their awareness of the reality of their teaching practices. This staff development technique proved useful to and popular with those, who had been involved in the project as long as the momentum of the research and the researcher's interest and enthusiasm was maintained. Two of the lecturers *invited* subsequent recordings and analyses, and expressed appreciation of the benefits to their teaching.

The various phases of this study of small group teaching documented in previous chapters - the analysis of aims and expectations of participants, the detailed examination of lecturer talk and student talk, and the interactions between those, and subsequently the evaluative analysis of practice by members of five of the groups in the sample - have demonstrated beyond doubt that there is considerable need for staff development in this specific area of teaching in groups. Examples of such training needs evidenced by the research are:

(a) development of lecturers' awareness of the possible mismatch between their intentions and the actuality of their teaching;

(b) raising of awareness in both students and staff of the peculiar value of small group work to the learning development of participants;

(c) improvement of specific skills areas eg

  (i) preparation and planning,

  (ii) questioning skills,

  (iii) use of appropriate methodologies;

(d) increasing the awareness of the value of collaboration amongst lecturers in the teaching process - in its preparation, execution and evaluation.

As previously described, during the course of this research project a technique of collaborative analysis by stimulated-re-call and triangulation has been developed, which can be used as a training device to satisfy need (a) above. In order to respond to needs (b) and (c) the literature exists already as discussed in Chapter Two of this thesis, eg Abercrombie (1960), Rudduck (1978) and others. With specific reference to need (c) amongst others, Jaques (1986) in his book and in particular his Chapter Ten "Training Methods and Activities" and his bibliography, gives many varied and effective examples, which might be used to develop skills in small group teaching.

The results of this research have demonstrated the value and effectiveness of encouraging a collaborative approach to the development of small group teaching strategies. Dissemination of the findings, which substantiate this, might help in satisfying need (d) above. Similarly in other areas of teaching, literature and techniques are in existence, eg Brown (1978) work on lecturing and explaining, and his joint work with Bakhtar (1983) on styles of lecturing, not to mention the plethora of readily available information on educational technology. In short, the means are there now to effect change and development certainly in the teaching areas of visual presentation techniques, lecturing and small group teaching.

2) Motivation to Develop Teaching

**Yet the change and development does NOT take place,** at least not to any significant extent. This research study also provides evidence of that. Despite previous work and publications in the field of learning development through discussion, the results of the analyses in Chapters Four, Five, Six and Seven here indicate either an ignorance of such work and theories, and/or a lack of motivation within most university academics to use the literature and techniques recommended by educational researchers, in order to improve their skills. Indeed the latter issue of motivation is the most crucial, since if this is lacking in individuals, in departments, in individual universities and in the university system as a whole, there will be no incentive to seek out the literature and techniques to improve teaching and equally no incentive to employ any that are already known.

Universities and the university system have so far predominantly paid lip-service only to previously expressed needs for change and development in the fields of academic staff improvement of performance. A variety of different models of staff development units have been instituted across higher education, but largely the provision has been inadequately resourced in terms of staffing and finance, and under-used by academics. When an attempt is made by Staff Development Units to provide comprehensive programmes of training and development, which range over the administrative, research and teaching aspects of an academic's job brief, response to those events can provide interesting data, significant to this discussion. Table 8.1 gives the total academic staff development programme offered to staff at the University of Sheffield during the academic year 1985-1986. The attendance numbers provide significant information in the context of motivation to develop teaching.

The first striking point to note is that all the events under the heading of Research attracted more than any of those listed under Teaching. (The final Research Workshop, "Supervising Research Students" was expressly limited to thirty-six participants). A second noteworthy observation is that the Administration/Management training activities, in the main targeted

# TABLE 8.1

UNIVERSITY OF SHEFFIELD - STAFF DEVELOPMENT OFFICE

ACADEMIC STAFF DEVELOPMENT ACTIVITIES
(26 in all)

October 1985 - September 1986

| TOPIC | DATE | NUMBERS OF ATTENDANCE |
|---|---|---|
| **TEACHING** | | |
| Induction Course | 2-3/10/85 | 42 |
| Introduction to Evaluating Teaching | 30/10/85 | 8 |
| Mature Students in the University | 13/11/85 | 3 |
| Small Group Teaching - Dentistry | 13/11/85 | 22 |
| Computer Assisted Learning | 26/11/85 | 9 |
| Personal Tutoring | 9/12/85 | 8 |
| Lecturing Skills Workshops | From 20/1/85 | (6x7) |
| (6 group meetings) | to 18/2/86 | 42 |
| Lecturing Skills Workshop - Dentistry | 22/1/86 | 26 |
| Laboratory Teaching Workshop | 12/2/86 | 9 |
| **RESEARCH** | | |
| EEC Research Funding | 21/1/86 | 82 |
| Funding by Research Councils | 4/2/86 | 73 |
| Funding by Charitable Organisations | 20/2/86 | 44 |
| Contract Research | 4/3/86 | 52 |
| Supervising Research Students | 13/5/86 | 36 |
| **ADMINISTRATION/MANAGEMENT** | | |
| Familiarisation Course for HoDs | 24/10/85 | 16 |
| Effective Staff Development (HoDs) | 12/11/85 | 57 |
| Staff Training and Development | 11/12/85 | 16 |
| Issues in University Management - Jarratt | 11/2/86 | 38 |
| Evaluation and Appraisal - Economic Studies | 12/3/86 | 26 |
| Leading a University Department (3 days) | 13-15/3/86 | 16 |
| Leading a University Department (3 days) (Repeat owing to demand) | 16-18/9/86 | 16 |

at Heads of Departments attracted more participants than those in the Teaching programmes. The four Management meetings with sixteen participants were again specifically limited to that number. The course, "Leading a University Department" needed to be mounted subsequently twice more that year in order to cater for the interest expressed in response to the original advertising of the first course in March, 1986.

In contrast to this manifestly healthy interest in developing performance in the areas of research and management/administration, it can be seen from the information in Table 8.1 that enthusiasm for improvement of teaching skills is comparatively lacking. The four activities under Teaching, which attracted more than ten participants all had special features. The Induction Course is presented to new lecturers at Sheffield as an activity they are obliged by the University to attend. The Lecturing Skills Workshops are a series, which follow the Induction Programme and pressure is put, via Heads of Departments, upon recently appointed lecturers to attend one of these group sessions. The two workshops, designed and conducted particularly for academics within the School of Clinical Dentistry were organised by the Head of Department, who has a particular interest in staff development and communicates this frequently and forcefully to his colleagues. It can be seen from the table that the other events in this section attracted pitifully few participants. It is worth noting also that coercion, in varying degrees of subtlety, was responsible for the lifting of numbers at the well-attended Teaching meetings, whereas there was no such obvious form of institutional pressure at work in recruiting for the activities under Research and Administration/Management. It might be argued, however, that external pressures from national bodies such as CVCP (eg The Jarratt Committee findings and recommendations) and UGC (eg The review of research profiles of individual academic departments) played a significant part in stimulating the evident interest in management and research issues.

These examples of attendance at seminars and the above observations on them concerning coercion, and pressure and other factors lead to the question of how a climate might be created within a university to encourage the improvement of performance of academic staff in *all* aspects of their work. An exploration of the current climate and of present attitudes to staff training and development and to the improvement of performance will help us to assess incentives for staff and motivation within them, to develop themselves in these areas.

### 3) Analysis of Some Current Attitudes to Academic Staff Development and Improvement of Performance

The years 1986 and 1987 have seen two important and unprecedented moves from the CVCP in connection with staff development. These have been:

(a) the circulation for comment of a draft Code of Practice on Academic Staff Training (Brown, 1986)

(b) the insistence in salary negotiations with AUT on the introduction of staff appraisal for academic and related staff (January, 1987).

Surveys across all academic departments of comment on both the above developments were carried out by the Staff Development Office at The University of Sheffield, in an attempt to gauge the receptivity and the resistance to these aspects of staff development at Sheffield. The results of those surveys provide an apt backcloth to the results and conclusions deriving from this research study of small group teaching. An examination of the attitudes to training and to the appraisal of performance, both of which are recommendations arising from this project, will furnish us with a detailed analysis of the context into which such conclusions and recommendations might be introduced and consequently the level of motivation currently present amongst staff to act upon them.
In the following sections prior to the conclusion, summaries of the results of the two surveys are presented. The main points arising are discussed in the concluding section.

Responses to the Code of Practice on Academic Staff Training

> "The University of Sheffield received the CVCP's Code of Practice with great interest and has accordingly prepared a thorough and detailed response. In order to report fully to CVCP, we considered the issue of academic staff development and the ideas contained in the document sufficiently important to merit a personal enquiry for comments to all Deans and Heads of Departments. The format of this response, which has been prepared by our Staff Training and Development Officer, is as follows:
>
> 1) Comments from the Training Officer containing also some details of academic staff training provision currently at Sheffield and how it corresponds to suggestions in the Code of Practice.
>
> 2) Positive responses from Deans and Heads of Departments.
>
> 3) Points of criticism.
>
> 4) Recommendation for consideration by CTUT."

The above quotation from the introduction to Sheffield University's response to the Code of Practice gives an indication in its details and comprehensiveness of the commitment to staff development on the part of the central management - the Vice-Chancellor's and the Registrar's Office as well as the Staff Development Officer. The nature of the *personal enquiry* referred to in the quotation is documented in Appendices Seven and Eight and discussed in Chapter Three. The letter and the Code of Practice was circulated to Deans

and Heads of Academic Departments in the University. The time of the exercise was not the most propitious (ie June/July), yet forty-nine responses out of a possible eighty-eight were received, which gave a fifty-six per cent reply rate, despite the timing. The replies were of varying length, detail and tone. The positive comments are summarised here.

Positive Responses to the Code of Practice

Every reply contained at least some constructive comment on the CVCP initiative on academic staff training. The range of positive adjectives and phrases used were as follows: "excellent; admirable; stimulating; reads very well; highly desirable; important for increasing awareness; is to be commended and is long overdue." One feature of the document which received considerable favourable comment was the emphasis on the importance of training and development for experienced staff as well as those recently appointed. Although there were the inevitable queries concerning some of the topics suggested for experienced staff, eg

> "invasion of privacy if tutorials and research supervision sessions were to be observed; some of the suggestions already happen in an informal way in departments and formulating them would not necessarily be helpful; difficulty for small departments to provide suggested training."

Despite such, the suggestions in Appendix D of the Code were on the whole well-received. Particularly commended were suggested **seminars and courses in the area of research - both funding and supervision - and leadership/management.** It was felt by many that such professional skills courses as are currently run in Sheffield in the above areas are very desirable and should be continued and extended. It was also suggested by one respondent that training for more experienced staff was even more necessary nowadays, since there was very little influx of new blood into the system to invigorate, stimulate and to question the all too settled ways of longer serving colleagues.

The recommendations on induction training and activities for recently appointed staff were largely favourably received. Again there were minor criticisms, eg that some of the topics suggested for centralised training activities would be better dealt with in departments or within broad subject areas, because they need specialist treatment. However, there was overall approval of the need for induction and many suggested that the administrative component should be developed and extended to include, eg new lecturers attending meetings of Senate, Council and other important university bodies, in order to increase their awareness and broaden understanding of the wider administrative and management issues.

Paragraph nine in the Code itself aroused particular interest. The allusion to the pooling of training across institutions was taken up and emphasised by several colleagues. It was felt to be a most useful suggestion that resources for training be pooled both inter-

departmentally among cognate departments in the same institution and also on an inter-university basis. Trans-binary pooling of resources was also felt to be important by one respondent, who expressed strongly the need for communicating with polytechnics and working together with them in academic training and development.

Paragraph eleven of the Code concerning the individual's responsibility for training was variously received. Most of those who commented specifically on this section, welcomed the emphasis on the individual and felt this was important for motivation, which is the key to effectiveness. One colleague said he would prefer to see the whole document re-orientated around the statement in this paragraph. There was, however, one strongly expressed view against this notion. It was argued that CVCP would not be taking this particular step now, unless it felt that it and institutions and departments had some responsibility for training. In industry, particularly abroad, it was argued, training is rightly regarded as part of an employer's responsibility and indeed obligation.

It is emphasised that the above is only a summary of the constructive comments received in response to the Code of Practice. There were, however, many dissenting voices amongst the responses and the counter-arguments are summarised in the following section.

Points of Criticism in the Responses to the Code of Practice

Several of the responses dwelled on deficiencies in the presentation of the Code. In some instances the style and tone of the document was criticised as being too bland and general. It was felt that it needed to be more strongly worded and to express more clearly the problems to be solved and how any actions taken might be objectively monitored. It is a common symptom of academics' resistance to ideas, that they focus pedantically on stylistic features. As indicated in the previous section there were also some objections to several of the topics listed in Appendices A and D of the Code.

One major area of general criticism, however, voiced by several colleagues was a perceived emphasis on centralised, highly-structured training. It was felt that the role of departmental training was underestimated and also the potential of on-the-job training. **Some regarded the suggested time allocation was too high and that academics could not take so much time away from activities such as research, particularly in the current climate, when UGC is allocating some of its resources according to research strengths.** It was suggested by one colleague that research *is* the area which differentiates universities from other teaching institutions and the pursuance of it should receive the most encouragement. This would not be done by *teaching* about *research* but rather by providing opportunities and more conducive conditions. Additionally it was argued by one other colleague that if the code of Practice remained unmodified, it might well have a counter-productive effect, since the suggested scope of organised training was so wildly inflated that

readers could react against the whole concept. it was also felt that the frequent reference to new lecturers might cause adverse reaction, since many departments now have zero new staff.

One significant area of critical comment came specifically from the biological and medical sciences. Several respondents from these academic departments expressed strongly the view that much skills training in the fields of teaching and research was better done in specific subject area groups and was indeed being done already at national level by specific professional societies such as The Physiological Society and The Royal College of Pathologists. Some had felt insulted by suggestions in the Code and the Appendices that departments did little or no training and that academics went around with closed eyes and minds to these issues. Many do, in fact, send staff regularly on such nationally organised courses. Some recognition of these activities should be included in any re-formulated version of the Code of Practice.

Another predominant reservation expressed by many colleagues was the problem of implementation. Aspects of the Code of Practice were well-received by many, but there were considerable misgivings about the probable gap between rhetoric and implementation. How was it to be assured that, for example, people did not merely pay lip-service for political reasons or that academics would devote the recommended amounts of time to training? In this context Paragraph 23 of the Appendices to the Code aroused much comment and criticism. One way, which might be construed, of implementing training and of obliging staff to it, was including attendance at training courses as one criterion in the selection of candidates for promotion. Some responded that this would never happen, since we already have criteria for promotion which are not recognised, and that research performance will remain by far the most important consideration, whatever official guidelines might say. Others interpreted this suggestion as threatening and manipulative, saying that training as a conformity to top-down requirements is the kind of training we can all do without. Effective training for professional achievement, it was pointed out, needs to be differently motivated - a simple solution of setting up a set of promotion prerequisites is *not* the way to do it. It was argued that there is an opportunity here with the Code of Practice really to achieve something, which must not be jeopardised by adopting the wrong procedures. A cautionary note was added, that such procedures might inevitably lead to mandatory training, which would in turn require the setting up of recognised accreditation units. Did universities want/need this development?

By far the most overwhelming criticism expressed in response to the Code of Practice was, however, its demands on increased resources, if it was to be implemented. All the suggestions require time, staffing and finance at a time when there is contraction in all those three areas in universities. On the whole colleagues expressed support for the contents, yet could not see how there was enough staff time available to ensure

implementation. Academic staff were now stretched to the absolute limit, without taking on even more responsibility in this area. This whole question of resourcing should be addressed more thoroughly in any reformulation of the Code.

4) Responses to Recommendations on Staff Appraisal

> "AUT's view is clear; appraisal must be beneficial and must be an aid to improving teaching, learning and research. One thing is guaranteed. There will have to be full consultation throughout universities at all levels, before a scheme can be implemented."
>
> (AUT Bulletin, November 1986)

In response to prevalent discussions at national and local level and to written suggestions as above, that consultation take place at all levels, the central management of the University of Sheffield via its Staff Development Office encouraged discussion within academic departments and responses from departments to a series of questions surrounding appraisal. In January, 1987 a package of introductory materials on appraisal was sent to all Deans of Faculties, Heads of Departments, Members of Senate, Chairmen of Staffing Committees, and Presidents of the Sheffield AUT and Non-Professional Staff Association. These materials were accompanied by the letter and the sheet of questions, included as Appendices Nine and Ten and introduced in Chapter Three. Respondents to the questions were invited to send in their comments to a small working group constituted by the Pro-Vice-Chancellor in charge of staffing and the Staff Development Officer. Their title was the Working Party on Staff Appraisal.

The following details in list form summarise the main comments made in the replies received from 15 individual members of staff, 17 departments, 2 faculties (comprising 27 departments), the Sheffield Branch of the AUT, the Non-Professional Staff Association and the Students' Union, in all 62 representative responses.

Views Expressed in Favour of Appraisal

1. Appraisal should be accepted as a normal aspect of good management practice.
2. Appraisal is an important tool to be used in order to clarify the objectives of individuals, departments and the institution, thereby facilitating policy formation.
3. An appraisal procedure contributes positively to staff development and to the efficiency and effectiveness of individual and collective performance. Thus it helps to maintain and improve the quality of teaching and research.
4. Appraisal is a special channel of communication, which helps senior staff form accurate perceptions of colleagues.
5. The information gained by both parties in the process of appraisal facilitates the efforts of both appraiser and appraisee to improve performance.

6. The opportunity of appraisal should be provided of *all* staffs and not just one or two categories.

7. In view of the terms of the recent national salary agreement, we are now no longer at the stage of deciding whether or not we accept appraisal, rather at the stage of *how* we might most effectively develop a system appropriate to our needs.

8. Those departments in the university, both academic and administrative, which have introduced appraisal, advocate its benefits and recommend its value.

Reservations Expressed About Appraisal

1. The goals of appraisal are inadequately specified.

2. The time devoted to running an appraisal system might prove too costly and too heavy a burden on those responsible for its execution.

3. There is currently a lack of adequate resources for the preparation, execution, and subsequent training and development demands; we need to secure guarantees of adequate staff development resourcing before introducing appraisal.

4. There is a lack of clarity concerning the differences, if any, between appraisal and assessment, and the link, if any, between performance appraisal and career assessment for promotion.

5. Current practice in the University is to review the majority of staff very frequently viz. annually during the probationary three years, at the efficiency bar, frequent reviews prior to Senior Lectureship, and then a review for Readership. Why do we need any more reviews and why cannot the present system, suitably reformed, subsume any such needs?

6. The University and its departments require a clear identification of their goals prior to the introduction of appraisal.

7. Questions were raised about the feasibility of evaluating systematically certain aspects of an academic's job, eg teaching.

8. Questions were also raised concerning both the credibility and the feasibility of specific models of appraisal, eg peer appraisal.

9. Appraisal need not be done more often than biannually.

5) Conclusions drawn from the Surveys

In this chapter the researcher has used one university as a case study, in order to illustrate and analyse on a small scale:

a) the relative attendance at staff development seminars in the areas of administration, management, research and teaching;

b) the prevailing attitudes in that one institution to current issues in staff development, ie academic staff training and staff appraisal.

This particular university was chosen, since the surveys referred to are recent, original and as yet unpublished, and were carried out by this researcher in her role as Staff Development Officer at Sheffield. In addition it is believed that the data and the commentary on it provides evidence pertinent to the discussion in this chapter concerning the level of motivation amongst staff to engage in activities, which might lead to the improvement of their teaching performance in small groups. It is clear to her that the techniques and methods used in the implementation and analysis of the surveys and the derived data, are less precise and sophisticated than those research strategies applied to the examination of the data in the preceding chapters of the thesis. Nonetheless it was felt appropriate to include this available information to identify and describe one particular context, into which the research findings of this project will be introduced and to assess the potential receptivity of the academic staff, and their motivation to act upon its recommendations. By the use of The University of Sheffield as a case study in this way, it is *not* suggested that the conclusions drawn are representative of a general climate and context across the university system as a whole. The qualitative summarising of and commentary on the information gathered from departments is rather intended to provide readers with empirical evidence to complement their own experience, ideas and examples gained from their own sources. It is, however, expected that some of the ideas and attitudes referred to in the preceding summaries of the surveys and the following overall conclusion will mirror perceived experience of attitudes within other universities and lend those perceptions some empirical substantiation.

Main Points Drawn from the Surveys Concerning Attitudes and Level of Motivation

[1] **Academics attend more readily staff development sessions in the areas of research and management, than they do the area of teaching.**

[2] **There is evidence of pockets of enthusiasm for and interest in both training and appraisal amongst the academic staff.**

[3] **These are outweighed considerably, in the responses from departments, by the negative comments, which are in both cases more comprehensive, detailed and emphatic than the positive reactions.**

[4] **The negative responses throughout both surveys have all the hallmarks of academic resistance. Pedantic comments on style, presentation and detail are often an indicator of rejection of the actual content and ideas.**

[5] **The most strident complaint in respect of both training and appraisal is that resources are currently inadequate - in particular the resource of academic staff time. It should be remembered in this connection that the management of time involves the setting and ordering of priorities. What is being indicated implicitly in the explicit statement of lack of time, might be that both activities have an insufficiently high priority on an academic's scale of importance, rather than that there is not enough time.**

[6] **Both surveys provoked reactions to the analysis and evaluation of teaching. The feasibility of systematic appraisal of teaching skills was questioned variously, and it is evident that many academics still reject the possibility of analysing and measuring performance in teaching. If the feasibility of evaluation is rejected, then there is for many academics no basis upon which to build the strategies for the improvement of teaching performance. It is significant to point out, however, that this research project and its analyses and results are predicted on reliable and valid techniques of appraising teaching. This research then demonstrates the feasibility of such evaluation.**

If we return now to the lecturer, whose comment began this chapter - how is he to act upon the new-found realisation of deficiencies in his small group teaching technique? By reviewing his performance with the class in the project, he has achieved the first developmental stage, that of awareness and recognition of a problem area in this teaching. The next stage would be to improve on those skill areas, in which he has identified a weakness. Already in this chapter we have reached the conclusion that the training literature and activities are available for him to develop those skills, and thus to improve the learning apportunities for his students. Whether he will take advantage of staff development provision or not, however, depends on his motivation to do that, which in turn depends, in part, on the institutional climate and its receptivity to staff development and to the feasibility of evaluating and improving teaching performance. The context within which he works is then a crucially important factor in his determination of action upon his learning point. The empirical evidence, presented in this chapter, of the context of one university indicates that unless his own intrinsic motivation to develop is high, the extrinsic motivation from his colleagues, his department and his university is likely to deter rather than encourage the second stage of skills' development.

**Until ways and means are found of making universities more aware of the necessity of improving teaching and the climate within them more receptive to the methods in existence of doing that, the small group learning experiences of our students will continue to fall far short of their aims and expectations.**

# CHAPTER NINE

# CONCLUSIONS AND RECOMMENDATIONS

This concluding chapter provides the opportunity to reflect on the way that has been travelled through the thesis, and the conclusions that have been drawn from the research, which might inform our future practices. The path planned in the introduction has been followed thus:

> Aims and expectations of both students and lecturers for their small group work have been examined by qualitative means in Chapters Four and Five.
>
> The actual practice of both these participating groups has been considered by analysing their talk and their interactions using both quantitative instruments and interpretive methods in Chapters Six and Seven.
>
> Aspects of the institutional framework surrounding these teaching and learning activities - at both local level in a particular university in Chapter Eight and at national level in comments on central initiatives in Chapters One and Eight.

Reflection on the research methods and practices applied in the project itself is salutary. It unveils imperfections and gives rise to certain questions. Of these perhaps the most prominent might be, whether the size of the sample in all three stages of analysis - aims, practice and context - is large enough for the conclusions drawn and hence recommendations given, to be generalisable to other situations. The defence against this suggestion is that the analysis has, on the whole, been of an interpretive and qualitative nature, designed to present detailed commentary of the experiences, attitudes and ideas of a variety of participants - consumers and providers - in the higher education system. The intention was not to collect a breadth of data, with which perhaps sweeping, generalised statements might be made, which would affect the whole system. They rarely, if ever, do. Each institution and the academic staff within it are invited to examine the insights given here in relationship to their practices, assess their validity and use them accordingly.

This researcher has a view and understanding of universities, which favours a slow but sure approach to effecting change and improvement in large educational institutions, which are themselves predicated on criticism, detailed analysis and enquiry. It would be contrary to their very nature and being, to accept quickly and too readily research findings and recommendations for development. The intention in this study has been to provide in-depth, reliable, quantitative and interpretive analyses of a representative, small sample of university teaching of a particular kind. The lecturers and the students involved in the project have themselves already had their awareness increased of the aims and practice of

small group work. Some have already been affected more than that. They have appreciated the gulf between perception of practice and its reality, and have helped develop a new technique of triangular analysis of small group teaching. Several have continued to use the technique as part of their own development strategy. A pebble of research has been cast out into the large, still, perhaps sometimes stagnant pond of university teaching. The first ripples have responded to its presence. It will continue to ripple out gradually to affect the whole. Change in universities happens most effectively in this way. What is intended and hoped for also in this research and its writing up, is that interested colleagues in other universities will recognise elements in these case studies, will take from them - from the research insights and the recommendations - information and practices, which will enable them to cast another pebble into their own pond, which will in turn ripple out its effects. This researcher is also committed to do more than her share of *pebble-casting*, to ensure that the results and messages of this research project are not allowed to languish and gather dust in libraries; rather that they are used to stir the still stagnant waters of teaching in higher education. Let us now review the pebbles with which we will stir. The following conclusions and recommendations are derived from this study and this sample:

[1] Conclusions and Recommendations Concerning Aims and Expectations

Conclusions:

(i) Only one lecturer in the sample expressed the aims of the small group session totally in terms of active student learning, and only two registered it as an opportunity for gauging the learning contexts of individual students.

(ii) Most of the lecturers indicated a recognition, that small group work was not primarily for the transmission of information. They stated principally its role in *clarifying, encouraging, enabling* and *monitoring* their students. Some of these expressed a pre-occupation with its use as an opportunity for close supervision and vigilance.

(iii) Student participation in small group classes caused mixed reactions amongst lecturers. Some appreciated greatly the opportunity of relating more closely to the learners, others found aspects of the process uncomfortable and problematical.

(iv) There was no correlation between the variables age, status, experience, sex and academic discipline - and the aims and expectations expressed by lecturers in this sample of their small group work. The only identifiable factor which appears to encourage a similar approach between lecturers is collaboration in teaching, which is more likely to happen amongst teachers within the same or related disciplines.

(v) Students have a clear understanding of the special aims of small group work. They know well what they and their lecturers should be intending to achieve.

Recommendations:

(a) **Lecturers need more opportunities for increasing their knowledge of the particular value to learning development of small group work, most specifically of the importance of two factors:**

- **appreciating and using the possibility provided by the medium of appraising individual learning contexts of their students.**
- **encouraging their students to take responsibility for their own learning, by identifying the students as the most active participants in group work rather than being predominantly passive.**

(b) **In addition to such knowledge and awareness development, opportunities should be provided for lecturers to develop their understanding of group processes and their interpersonal skills in groups, in order that their expectations of discomfort and difficulty are diminished.**

(c) **In both the above activities of awareness/knowledge and skills' development for lecturers, the involvement of students is highly recommended. They are well aware of their own and the lecturers' intended achievements in small groups, and both would benefit from a collaborative approach to improvement.**

[2] Conclusions and Recommendations Concerning the Practice of Small Group Teaching

Conclusions:

(i) There is ambiguity between the perceptions lecturers have of the way they intend to and do teach, and the actual practice of that small group teaching.

(ii) Students do *not* participate frequently in small groups; either by responding to their lecturers, or by interacting with each other in discussion. **Lecturers talk on average for over 60% of the time.**

(iii) Despite the expressed aims, a large amount of the 60% of that lecturer talk is spent in lecturing, ie information transmission.

(iv) There was comparatively little time devoted in this sample to questioning by lecturers, of which most was eliciting the recall of information from the students rather than prompting analysis or evaluation. Also the style of that questioning was at times dubious. There was evidence of a significant number of repeat questions and students made criticisms of lecturers' questioning technique.

(v) Factors which were identified as contributing to higher levels of student contribution and some degree of interaction between students were:

- **the age and experience of the students (final year and postgraduate students participated more)**
- **preparation for classes**
- **clarity of methodology and structure**
- **collaboration amongst lecturers in the preparation, execution and evaluation of small group teaching.**

Recommendations:

(a) **Training techniques and approaches are needed to aid lecturers to become aware of false perceptions of practice and of the ambiguity between aims and the actuality of the teaching. One effective technique has been developed during the course of and via the methodology of this project, which is recommended for this purpose.**

(b) **Not only do lecturers require help in recognising the potential of small group work and the value of increasing student participation from the present low level, but also practice in certain skill areas is required:**

- **questioning skills**
- **enabling skills**
- **the skill of remaining silent.**

(c) **Staff development sessions are required in educating academic staff in those factors, identified in this project, as contributing to increased student involvement in learning, ie**

- **preparation**
- **appropriate methodologies**
- **organisation of structure**
- **collaboration in the process of teaching.**

**Encouragement to develop the above areas is vitally important to the improvement of small group learning.**

[3] Conclusions and Recommendations Concerning the Institutional Environment of Teaching Activities

Conclusions:

(i) The results of surveys conducted in the university, which served as a case study, indicate doubt, misgivings and resistance about and to current developments, which might involve the analysis, evaluation and improvement of efficiency and effectiveness in academic work, including teaching. There was particular scepticism concerning the feasibility of evaluating teaching.

(ii) Nonetheless there are presently *hooks*, upon which the improvement of teaching might be hung, eg staff appraisal, the increase in provision of Continuing Education, the focus in Government publications on *quality* of teaching, the CVCP's Code of Practice, etc.

(iii) Furthermore, there is evidence to suggest that external factors have effected an increase in interest in and provision of staff development activities in other aspects of the academic role. The Jarratt Report has led to increased management development provision. The UGC research ratings have led to a focus in staff development programmes on research issues and such sessions have attracted considerable interest and attendance.

Recommendations:

(a) **Staff Development providers should constantly remain aware of the theory that change and improvement is effected gradually by both internal and external influences. Educational research findings and the consequent development of techniques and strategies are only one factor, which must be skilfully and politically interwoven with a continuously updated knowledge of external motivators. An individual lecturer will only be encouraged to develop awareness and skills, if there is a combination of his/her intrinsic motivation, extrinsic motivation at departmental and institutional level and provision of resources to enable the development. The creation of such a threefold climate requires of staff developers not only enthusiasm for teaching and commitment to research but also political sensitivity and astuteness. It is recommended that they be continually developed themselves in these aspects.**

(b) **Further research is required into current models of staff development provision and their relative effectiveness. It might be that those institutions which incorporate staff development into the corporate management strategy and resource it accordingly, demonstrate systems which have a greater impact. Fieldwork is very much needed in this area, in order that universities can shape their staff development policies and their implementation according to firm and reliable indicators of efficiency and effectiveness.**

(c) **At institutional and national level initiatives should be taken - on the lines of the Jarratt enquiry - to consider teaching effectiveness in higher education. The results and recommendations of such a comparable investigation would act similarly as a stimulus to change and improvement in the field of teaching.**

On this final - perhaps to some - threatening recommendation, I return in conclusion - for stylistic reasons of symmetry but more importantly to give a salutary reminder to us all - to a quotation given in the Introduction:

> "Universities have always been more ready to investigate and assess others than themselves, and who can blame them for sharing in the frailty of human nature. However, the time may not be too far off when, if they do not maintain order in their own house, others may insist on doing it for them. If this happened the inroads that would be made into the freedom which universities rightly cherish could be incalculable. Will they be able to change in time to prevent this from happening?"
>
> (Elton, 1987)

This study has shown that in the field of teaching and small group teaching in particular, that there *is* room for the "maintenance of order in our own house" and in addition, the research findings, the literature, the materials and the techniques are there and available, to enable us to effect change and improvement before "others may insist on doing it".

**Let us collaboratively - researchers, practitioners, planners and governors in universities - harness those available resources, but also shape the will that is necessary to effect that change and improvement for ourselves.**

# APPENDIX ONE

LECTURERS' COMMENT SHEET — SMALL GROUP TEACHING PROJECT

NAME (Optional): ..... SEX: .....

DEPT: ..... AGE: .....

SECTION ONE (TO BE COMPLETED BEFORE THE CLASS)

1. Please outline what you hope this particular class will achieve

(a) .....

(b) .....

(c) .....

.....

.....

2. In what ways is teaching in a small group situation likely to help you achieve the above things?

(a) .....

(b) .....

(c) .....

.....

.....

SECTION TWO (TO BE COMPLETED AFTER THE CLASS)

3. In what ways did you achieve what you set out to do and to what extent?

(a) .....

(b) .....

(c) .....

.....

.....

4. What evidence led you to believe that you had/had not achieved them?

.....

.....

.....

.....

.....

.....

5. How satisfied were you with:-

(a) the beginning

(b) the amount of attention gained from the students

(c) the number of contributions made by the students

(d) the quality of contributions made by the students

(e) the amount of interaction between you and the students

(f) the amount of interaction between the students themselves

(g) the ending

6. In what ways were the students inhibited by the presence of the cameras and observers?

(a) Opening Phase (first ten minutes)

(i) .....

(ii) .....

(iii) .....

.....

(b) Middle Phase

(i) .....

(ii) .....

(iii) .....

.....

(c) Closing Phase (last few minutes)

(i) .....

(ii) .....

(iii) .....

.....

7. Please complete the following sentences:-

What I enjoy most about small group teaching is .....

.....

.....

.....

.....

.....

What I find most difficult about small group teaching is .....

.....

.....

.....

.....

.....

Any other comments

(Please return to Mrs P A Luker, Department of Education. Thank you for your help.)

# APPENDIX TWO

STUDENTS' COMMENT SHEET — SMALL GROUP TEACHING PROJECT

NAME (Optional): ..... SEX: .....

DEPT: ..... YEAR: .....

1. What, do you consider, was the lecturer aiming to achieve in this class?

(a) .....

(b) .....

(c) .....

.....

.....

2. In what ways did the small group teaching situation help to achieve these things?

(a) .....

(b) .....

(c) .....

.....

.....

3. Please list some things that you enjoy about being taught in a small group

(a) .....

(b) .....

(c) .....

.....

.....

Please list some things that you dislike about being taught in a small group

(a) .....

(b) .....

(c) .....

.....

.....

4. What proportion of your teaching in the university so far has been by small group teaching methods?

| (Please put tick in relevant column) | $\frac{1}{4}$ | $\frac{1}{2}$ | $\frac{3}{4}$ | all |
|---|---|---|---|---|
| (a) during your first year | | | | |
| (b) during your second year | | | | |
| (c) during your third year | | | | |

.....

.....

5. What advice about how to work in small groups would you give to someone beginning his/her first year at university?

(a) .....

.....

(b) .....

.....

(c) .....

.....

(d) .....

.....

6. In what ways did you feel you were inhibited by the presence of cameras and observers in this class?

(a) Opening Phase (first ten minutes)

(i) .....

(ii) .....

(iii) .....

(b) Middle Phase

(i) .....

(ii) .....

(iii) .....

(c) Closing Phase (last few minutes)

(i) .....

(ii) .....

(iii) .....

7. Any other comments

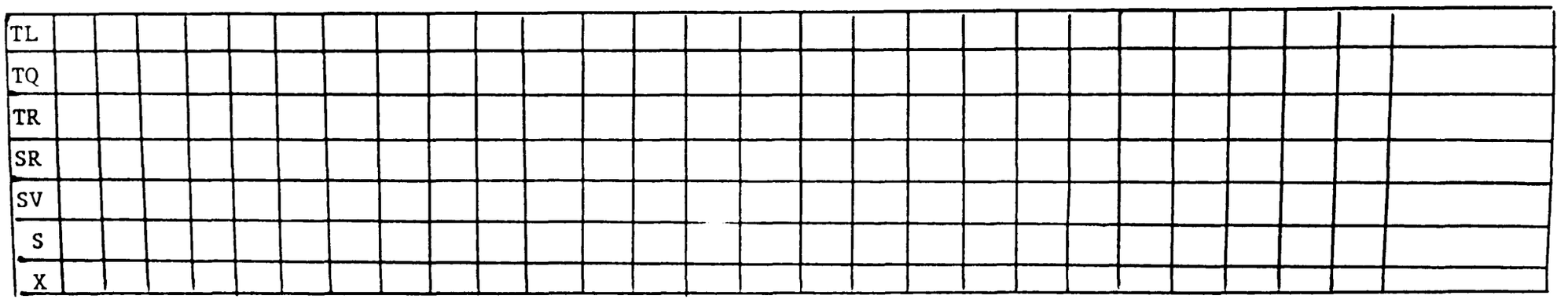
(Please return to Mrs P A Luker, Department of Education. Thank you for your help.)

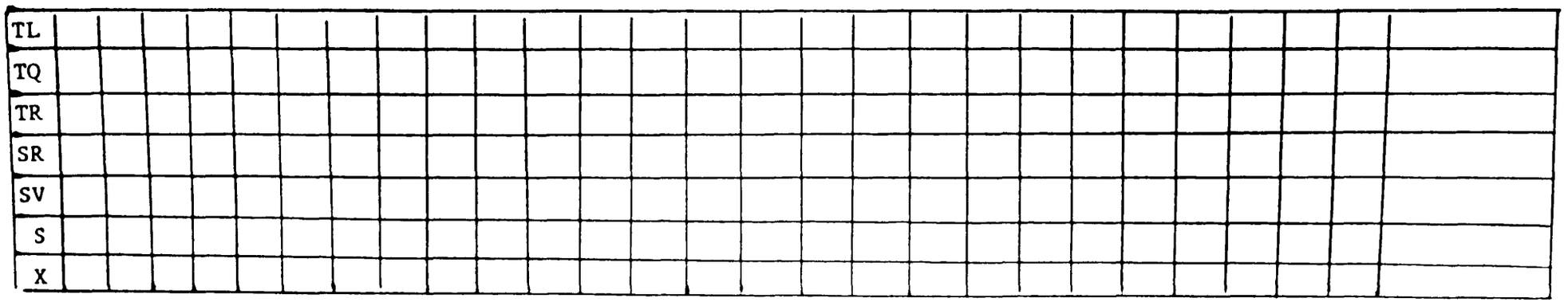
## BIAS RECORDING SHEET

TL - TEACHER DESCRIBES, EXPLAINS, NARRATES, DIRECTS
TQ - TEACHER QUESTIONS
TR - TEACHER REACTS TO STUDENT RESPONSES
SR - STUDENT RESPONDS TO LECTURER'S QUESTIONS
SV - STUDENT VOLUNTEERS INFORMATION, COMMENT, QUESTIONS
S - SILENCE
X - UNCLASSIFIABLE (WRITING ON BLACKBOARD, ETC)

NAME OF LECTURER ..... SUBJECT ..... YEAR ..... GROUP SIZE .....

USE 3 - SECOND INTERVALS



# APPENDIX FOUR

## COMPUTER PROGRAMME FOR ANALYSIS OF BIAS RESULTS

"USE: The program is for use on a 32K PET with BASIC 2. or 4. but it is planned to adapt and extend the program to run on other microcomputers with more sophisticated graphics facilities.

It is assumed that the user has already prepared the data on tape or disk using program BIAS/INPUT (P00928/INPUT). A twenty-eight minute sample of data called BIAS/SAMPLE (P00928/SAMPLE) is available for demonstrating the program.

To run the program from tape, insert the cassette in the cassette unit with the side you want facing upwards, and ensure the tape is fully rewound. Then type LOAD and press the RETURN key on the keyboard and the PLAY button on the cassette unit. The program is long and will take about five minutes to load. When the program has finished loading, the message READY will be displayed. Type RUN and press RETURN and follow the instructions within the program.

To run the program from disk, insert the disk in to drive 0, close the flap and type: DLOAD"P00928/BIAS".

When the PET displays the READY message type RUN and press RETURN and follow the instructions within the program.

If a printer is connected to the PET then you will be offered the option to print the screen display at specified points thus enabling the compiling of a file of results and diagrams for future reference.

After the data has been input from either tape or disk, a time lapse diagram is produced for the complete sample of classroom interaction. Following the study of the diagram the user is offered the following options to aid further analysis of the data:

1. Display time lapse diagrams for extracts chosen from the complete sample. The diagrams can begin at any point in the data. Three minutes at a time are displayed on the screen with an option to specify a number of consecutive periods.

2. Display the histograms showing the percentage of time spent in each category of activity for the whole or any part of the sample period.

3. Display composite histograms for periods of up to thirty minutes. Any permutation of not more than three categories can be selected to form the basis of a graph. Graphs beginning at any point in the complete sample data can be constructed.

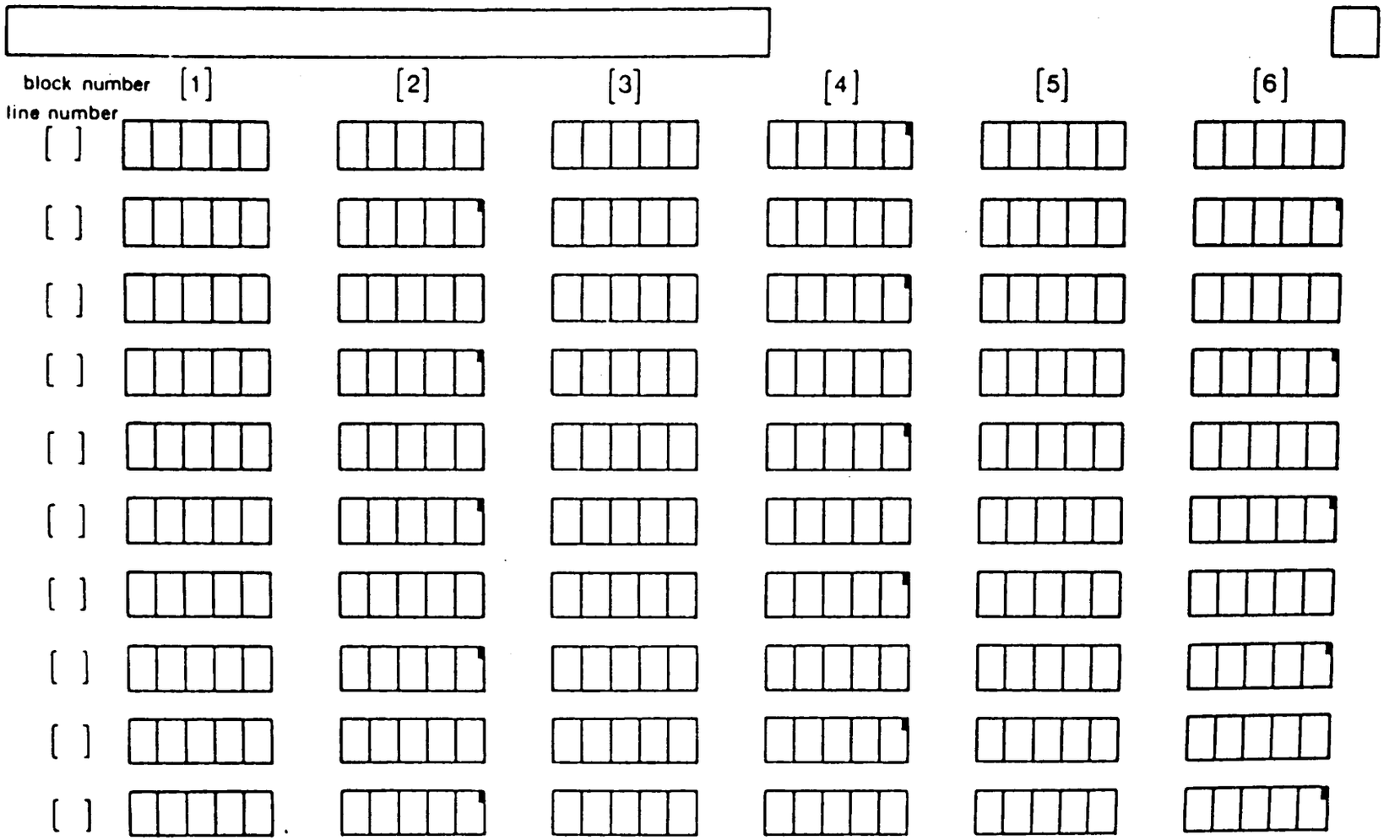
4. Display transition matrices. The percentage of the sample spent on each category is displayed, with a choice of:

    a) A transition matrix which shows the number of transitions between each bleep, whether it is to the same category or a different category.

    b) A switch matrix which only shows the switches from one category to another."

(The above instructions are included with the permission of the authors - Rodgers, D G and Smith, G M, 1979)

BIAS PROGRAM : DATA INPUT SHEET



## QUESTIONING ANALYSIS SCHEDULE

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. ADMINISTRATIVE | | | | | | | | | | | | | | | | | | | | |
| 2. INFO. RECALL | | | | | | | | | | | | | | | | | | | | |
| 3. SPECULATIVE (ON KNOWN DATA) | | | | | | | | | | | | | | | | | | | | |
| 4. PROBLEM-SOLVING | | | | | | | | | | | | | | | | | | | | |
| 5. ANALYTICAL AND EVALUATIVE | | | | | | | | | | | | | | | | | | | | |
| 6. PROBE | | | | | | | | | | | | | | | | | | | | |

| | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. ADMINISTRATIVE | | | | | | | | | | | | | | | | | | | | |
| 2. INFO. RECALL | | | | | | | | | | | | | | | | | | | | |
| 3. SPECULATIVE (ON KNOWN DATA) | | | | | | | | | | | | | | | | | | | | |
| 4. PROBLEM-SOLVING | | | | | | | | | | | | | | | | | | | | |
| 5. ANALYTICAL AND EVALUATIVE | | | | | | | | | | | | | | | | | | | | |
| 6. PROBE | | | | | | | | | | | | | | | | | | | | |

ADDITIONAL COMMENTS:

# APPENDIX SEVEN

## ACCOMPANYING LETTER - ACADEMIC STAFF TRAINING

**The University of Sheffield**

**Personnel Department**

Sheffield S10 2TN
Tel: Sheffield 78555
STD code: 0742

P W Seton, BA(Econ), FCA, FIPM, Director of Personnel Services

For telephone enquiries on this matter ring Mrs. Luker
Your Ref:
Our Ref: PAL/JE ext. 4022

24th June, 1986

Dear ,

We have received the attached letter and code of practice for academic staff development from the Committee of Vice-Chancellors and Principals. It is my task to comment on the document and report back to the Vice-Chancellor by late September, in order that he may send our comments in to CVCP in October.

I would be most grateful if you could help by reading the suggestions on training and development for academic staff and send on your responses and thoughts to me by Thursday, 31st July, 1986. It would be useful if there were an opportunity for you to get comments also from colleagues in your department.

I look forward to hearing from you and thank you very much in advance for your help and time with this.

Yours sincerely,

PATRICIA A. LUKER
Staff Training and Development Officer

# APPENDIX EIGHT

## DRAFT CODE OF PRACTICE ON ACADEMIC STAFF TRAINING


**Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom**

29 Tavistock Square London WC1H 9EZ Telephone 01-387 9231 Telex 8811492

*Secretary General:* B H Taylor BSc(Econ)
*Assistant Secretaries:* D E Bennett MA K S Davies BA Miss B Crispin BSc(Econ) A G Aldridge BA


T7/11/1
CIRC/86/46

3 April 1986

Dear Vice-Chancellor

Academic staff training

You will know that the committee on the training of university teachers (CTUT) has prepared a code of practice intended as a set of flexible guidelines to assist universities in developing, implementing and monitoring academic staff training. The code and its appendices have been drawn up following the national survey undertaken last spring and the national seminar held in July 1985 under the auspices of the Committee and they reflect existing practices in many universities.

The Vice-Chancellors' Committee has agreed that the code merits careful study in universities and I attach 20 copies of the document for this purpose. We have of course no objection to its reproduction as necessary for distribution to relevant committees.

We would welcome comments during the autumn term.

Yours sincerely

B H TAYLOR
Secretary General

Professor G D Sims
Vice-Chancellor
University of Sheffield

T/C/b1

# COMMITTEE OF VICE-CHANCELLORS AND PRINCIPALS

ACADEMIC STAFF TRAINING

Code of practice

for consideration and comment

by universities

April 1986

TRAINING OF UNIVERSITY TEACHERS

## Code of practice on academic staff training in universities

FOREWORD

This code of practice has been prepared by the committee on the training of university teachers (CTUT), the remit, composition and membership of which is given below. It draws upon findings from a survey of academic staff training in 67 institutions conducted on behalf of the Committee, and on discussion at a national seminar attended by senior representatives of 38 universities.

The code that has emerged from these consultations has been submitted to the Vice-Chancellors' Committee as a guide for developing, implementing and monitoring academic staff training in universities. The code is based on examples of good practice. It is not intended as a series of prescriptions but as a set of flexible guidelines to assist universities in the discussion and formulation of policy and procedures for staff training.

The appendices to the code provide examples of various approaches to staff training. More detailed information about these is available from the office.

The Vice-Chancellors' Committee has agreed that the code and appendices should be circulated to universities for their consideration, and the Committee would be glad to receive comments during the autumn term.

The Committee of Vice-Chancellors and Principals
29 Tavistock Square
LONDON
WC1H 9EZ

April 1986

/Remit...

## Remit of the CVCP committee on the training of university teachers

The remit of the CVCP committee on the training of university teachers is to meet from time to time to review current provision and to ensure that universities are made aware of that provision.

## Composition and membership of the committee

Chairman nominated by the CVCP: Professor William Taylor, Vice-Chancellor of Hull.

Two members nominated by the CVCP: Dr B E F Fender, Vice-Chancellor, University of Keele; Dr D J E Ingram, Vice-Chancellor, University of Kent.

Two members nominated by the Association of University Teachers: Mr S Ruhemann, Bradford, President, AUT, 1982-83; Dr W Stephenson, London, President, AUT, 1983-84.

One member nominated by the National Union of Students: Mr G E J Ferres, Education Officer, NUS.

Four members appointed on an ad hominem basis by the CVCP from among those involved in universities in local training arrangements: Professor R A Becher, University of Sussex; Professor F A Benson, University of Sheffield; Dr F C Quinault, University of St Andrews; one vacancy.

CVCP part-time national co-ordinator and secretary of the committee: Dr George Brown, Reader in University Teaching Methods, University of Nottingham.

/INTRODUCTION...

INTRODUCTION

1. Associated with the professional freedom of university teachers are three responsibilities:

> to maintain and enhance professional standards in teaching, research and associated administrative and management activities;
>
> to seek and take advantage of opportunities for training and career development;
>
> to take account of the views of client groups within and outside universities.

2. Over the past 25 years these responsibilities have been identified and discussed on a number of occasions by the national bodies most closely concerned with the development of universities - the University Grants Committee, the Committee of Vice-Chancellors and Principals, the Association of University Teachers and the National Union of Students. In particular the UGC document, "A Strategy for Higher Education into the 1990s" stresses the importance of staff development and training:

> "It is over twenty years since the Committee first recommended organised training for newly appointed teachers. Since then initial and in-service training have greatly expanded in other branches of education, and staff appraisal has become much more searching and constructive for professional staff in many organisations. In the universities there are modest staff development programmes, and some systematic induction for new staff is now common. This is not sufficient. The need for staff development today is greater than ever, and does not relate only to new staff. We believe that further examination of this problem is required both by individual universities and by the CVCP."

3. Now and in the medium term future the tasks of university teachers are probably more complex and challenging than ever before. University staff are faced with problems of economic constraint coupled with pressures towards public accountability and lack of mobility in universities, together with limited opportunities for promotion and the possibility of redeployment and changes in career. Rapid changes in technology and occupational needs have implications for the content, organisation and delivery of undergraduate and postgraduate education and thus for academic staff training.

4. Academic staff training in the university may be conceived as operating at three levels:

> improving opportunities for the individual to enhance and enrich professional skills;
>
> improving the quality of teaching and research of departments;
>
> improving the quality of the academic environment of the institution.

/There may...

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/There may...

5. There may sometimes be tensions between an individual's professional goals, the goals of his or her department, and the goals of the institution. The management and resolution of such tensions is not easy but can be facilitated by a flexible policy of academic staff training.

6. Training is but one aspect of individual, departmental and institutional development. Whilst this paper does not attempt to tackle the wider issues, its guidelines and suggestions for training are set in the context of an individual and departmental framework. The suggestions and guidelines are based upon examples of good professional practice identified by the CVCP committee on the training of university teachers (CTUT) which are consonant with the traditions and concerns of university teaching.

/CODE OF PRACTICE...

CODE OF PRACTICE

## Policy

1. Many universities and colleges already have formal policies on academic staff training; these sometimes form part of broader statements on staff development. It is suggested that universities should establish or review such policies for endorsement by their Senates and Councils (or Courts in Scottish universities).

2. Policies should include explicit statements on provision for training and other opportunities for professional development both for newly-appointed and more experienced staff. The policy statement should specify the training responsibilities of departments and of individual members of staff, and indicate how the training provision is to be funded, evaluated and reviewed.

## Academic staff training committees

3. Most universities already have a working party or committee concerned with academic staff training and development. It is suggested that each institution should have such a committee which reports to Senate and Council (Court in Scotland). The committee should have clear terms of reference and be chaired by a Pro-Vice-Chancellor or senior member of staff. It should include some elected representatives from academic staff and from the student body.

4. The committee should devise a programme of training activities and submit an annual report, with details of the participation in activities, to Senate and Council (or Court in Scottish universities). A specified budget should be allocated in support of training activities.

5. In addition to this formal committee, consideration might also be given to setting up informal interest groups on various topics such as supervising research students, the teaching of humanities or laboratory work. Appendix 1 contains relevant examples of such groups.

## Co-ordinators

6. It is suggested that the existing practice of many universities in appointing a full-time or part-time co-ordinator for academic staff training might be more widely followed.

/p.2...

7. The duties of the co-ordinator should be clearly specified and might include the organisation of a training programme, liaison with departments, servicing the university training committee, and the recruitment of academic and other staff as organisers and tutors of workshops, seminars and other training activities.

8. The responsibilities of a part-time appointee should be recognised by a reduction in teaching and other commitments, or in some other appropriate way.

The training programme

9. Most universities provide some training activities for both new and experienced staff. It is suggested that all institutions independently or in association, should have a co-ordinated programme of courses and events which take place throughout the year. This programme should include: induction for all newly appointed staff, irrespective of grade or previous experience (Appendix 2); initial training for less experienced lecturers (Appendix 3); workshops and seminars which reflect the specific needs and interests of all staff (Appendix 4); and training in academic management and leadership (Appendix 5).

Training based in departments

10. Departments, as well as institutions, have a responsibility for training. Some departments already provide systematic on-thejob training for their academic staff through seminars, discussions and job rotations which are specific to their own subject and research needs. Such provision should, as far as possible, be co-ordinated with that provided by the institution. Some examples of such work are given in appendix 6.

The individual's responsibilities

11. Responsibility for professional development ultimately rests with the individual. University teachers should be free to choose the training activities in which they engage. But every university teacher, regardless of status or other commitments, should set aside some time each year for training and developmental activities. These activities might include identification of personal strengths and weaknesses in teaching, research and administration or management, exploration of ways in which competence can be improved, and attendance at courses and workshops.

/p.3...

12. The time given to training activities will depend upon individual circumstances and changing patterns of departmental activity. It may be helpful to note that the survey of academic staff training undertaken by the CTUT in 1985 yielded recommended times, over a three year cycle, of fifteen days for newly appointed lecturers, nine days for experienced staff and seven days for heads of departments.

Universities, departments and individuals

13. Universities, departments and individual members of staff have responsibilities for the quality of teaching, research and the associated administrative and management tasks. Training can make a significant contribution to performance on these tasks. But without the visible support of Councils (Courts) and Senates, of vice-chancellors and principals, of deans and heads of departments, staff training will wither rather than flourish. Without the support of individual members of staff, the provision of staff training and development will have no effect.

/APPENDICES...

APPENDICES

These appendices provide examples of various approaches to staff training which may assist universities, departments and individuals.

A INFORMAL INTEREST GROUPS

1. In addition to workshops, seminars and departmentally based training activities, some universities have established informal interest groups which meet regularly within departments or faculties or, where appropriate, across faculties. Such groups meet to share ideas and experiences, to develop new course materials or research strategies. A few examples are:

   Teaching statistics to non-mathematicians
   Teaching analysis to engineers
   Small group teaching in the arts
   Developing computer assisted learning
   Improving problem-solving classes
   Researching non-destructive modes of testing materials
   Uses of microcomputers in laboratories
   Computer assisted design
   'Learning more, teaching less...'.

2. These working interest groups are not necessarily permanent fixtures. Ideally the committee and co-ordinator would need to monitor the changing interests of the staff, form such groups and encourage them to continue for as long as they fulfil a useful purpose.

3. In one university, members of the interest group are encouraged to attend workshops and seminars in other institutions and to report back their comments. The interest groups are given the opportunity to provide a workshop or seminar on their topic of interest to other members of the university.

B INDUCTION FOR ALL NEW STAFF

4. Programmes of induction might contain brief addresses by the Vice-Chancellor, Registrar, Bursar and Librarian and by other staff and a student representative. However there is a danger of information overload in induction courses. Two common weaknesses are: first, the tendency to require participants to sit through a day of speeches; second, for those speeches to be remote from the experiences and perceptions of the participants. Thus it is suggested that participants are presented with brief, clear documents on most aspects of the university. For example, the administrative structure, health and safety, conditions of service, professional bodies, student health and student services might all be documented. The induction course might include a tour of the university campus and a demonstration of the teaching resources that are available. If appropriate, the central teaching resources unit should be visited and staff encouraged to make use of the facilities for developing their teaching materials.

/p.5...

5. Some part of the induction programme might involve brief problem-solving exercises such as submitting a course proposal, piloting a new course through the committee structure, or helping a student in difficulty. The talks and activities should take account of the background, experiences and interests of the participants and be related to their tasks as members of the university. Universities may wish to run the induction course jointly for administrative and academic staff.

6. A social event should form part of the induction course to enable new members of staff to meet informally senior members of the university.

C A COURSE FOR LESS EXPERIENCED STAFF

7. The course for staff newly appointed as lecturers should focus sharply on training for the tasks which they will encounter in their first few years in the post. Hence it should not be concerned with theories of learning or curriculum development so much as with the practice of teaching, research and management. The topics of such a course could include preparing and giving lectures, small group teaching, problem-solving classes (for scientists and engineers), laboratory work (for scientists, engineers and medical staff) constructing examination questions and assignments, marking assessments and examinations, counselling students, supervising research students, writing research submissions, writing research papers, presenting papers at conferences, designing short courses, committee work, office efficiency, and managing one's time.

8. Practical approaches, such as video recordings of mini-lectures, role-play and simulations, should be used to develop skills and insights into individual performance and strategies. Presentations of educational research findings should be subordinate to the main task of helping to develop skills and insights.

9. The course might be organised in a series of blocks of time during vacations, in weekly sessions, or in some combination of block and weekly sessions.

D WORKSHOPS AND SEMINARS FOR EXPERIENCED STAFF

10. An annual programme of activities for experienced staff might be devised by the co-ordinator and the committee concerned with academic staff training and development. The programme should, as far as possible, reflect the needs and interests of individual members of staff and of departments. Hence it may be necessary to conduct a modest survey of staff needs and interests.

/p.6...

11. The topics given below may provide a useful check-list for staff interested in mounting and attending workshops and seminars concerned with teaching and research (see also list in Appendix 5 of topics concerned with management functions):

1. Research supervision
2. Management of research projects
3. Applications for research grants
4. Writing research articles/ conference papers
5. Consultancy/entrepreneurial skills
6. Marketing/media presentation
7. Lecturing
8. Small group teaching
9. Problem-solving classes
10. One-to-one tutorials
11. Laboratory teaching
12. Self-study including computer assisted learning
13. Helping students to learn
14. Designing courses
15. Assessment and examinations
16. Providing feedback to students
17. Personal tutoring and counselling
18. Helping overseas students
19. Interviewing and student selection
20. Committee work
21. How to provide departmental-based training of staff
22. Training the staff trainers
23. Evaluating teaching
24. Self-appraisal
25. Intellectual property rights
26. Time management
27. Counselling
28. Coping with stress
29. Preparing for retirement
30. Improving publicity
31. Supervising overseas students.

12. Just as important as the topics, however, are the modes of teaching and organising the workshops or seminar. Particular attention should be paid to the overall goals, the documentation, the planned activities of the participants, and the quality of any presentations. A danger in workshops is that the planned activity is not perceived as relevant. A danger in seminars is that participants pool ignorance and well-rehearsed prejudices rather than knowledge and insights.

## E ACADEMIC MANAGEMENT AND LEADERSHIP

13. All academic staff are concerned to some extent with academic management and leadership so it is appropriate to provide courses on such matters for lecturers, senior lecturers and professors. Managerial tasks and functions vary according to size of department and the subject of the department. The list that follows provides examples of topics which would be appropriate for training courses in academic management and leadership:

Supervision of clerical and technical staff
The role of the head of department
Managing departmental funds
Introducing innovations
Managing a research group
Publicity and public relations
Chairing meetings
Improving committee work
Diagnosing departmental difficulties
Staff selection

/p.7...

Staff appraisal and support
Health and safety at work
Course design
Reviewing departments
Identifying departmental training needs.

14. Universities might also provide some internal induction courses for heads of departments concerned with specific procedures and policies. As in the case of courses on teaching and research, management courses should, as far as possible, be practically based. Role-plays, simulations, problem-solving tasks and discussions are useful modes of learning management strategies and skills. Follow up and review activities could be built into the courses to enable participants to examine and modify their practices.

F DEPARTMENT-BASED TRAINING

15. Department-based training activities are valuable for both new and experienced staff. The training activities might be linked with the programme of courses and workshops provided by the university. Smaller departments may wish to collaborate in offering joint training activities.

16. The following suggestions for department-based training activities could be used for less experienced staff:

Outlining the year's programme of teaching and research activities, including the deadline for examination questions, likely pressure on laboratory space, meetings and times for submission of items, registering and upgrading research students.

Helping a new lecturer to prepare and structure a lecture.

Attending selected lectures and providing constructive comments on the new lecturer's mode of presentation.

Sharing a lecture with a new lecturer. (Team lecturing).

Sharing a seminar.

Observing a seminar, tutorial or research supervision.

Discussing the construction of examination questions and, where appropriate, marking schemes.

Helping a new lecturer to write research articles and prepare conference papers.

Helping a new lecturer to prepare research submissions and other reports.

/p.8...

17. Some of the above activities may be useful for more experienced staff who are interested in refreshing their approaches to teaching and research. The activities are best undertaken voluntarily between colleagues. Other department-based activities might include selecting and interviewing students, helping overseas students, organising research supervision, admission procedures, and word processors and their effect upon departmental procedures.

18. In addition to specific training activities, departments might provide systematic job rotation for their members so that all colleagues have some responsibility for each of the major management/administrative functions of the department.

19. If department-based training is provided, it is important for someone within the department to have the responsibility for co-ordinating the programme of training activities and for providing a brief annual report to the university committee. Such reports might also be of assistance to other departments planning to develop their own training programmes.

G UNIVERSITIES, DEPARTMENTS AND STAFF

20. Just as individual members of academic staff have responsibility for their own training, so has a university and department a responsibility to identify training needs, to provide training opportunities and to recognise the training undertaken.

21. Training needs may be identified in three ways. First, the relevant committee could conduct a survey, inviting each member of staff to indicate an interest in particpating in, leading or contributing to a particular workshop or seminar (based on the topics listed in Appendices 3-5). Second, each department might discuss its training needs, based upon brief reports from individual members of staff on their plans for teaching, research and management during the coming year. Third, the appointed co-ordinator could discuss informally with some heads of departments each year their possible training needs. For example, an intake of overseas postgraduate students may require some modification of supervision procedures within a department and greater expertise in developing students' writing skills in the subject area of the department.

22. A simple method of evaluating the relevance and usefulness of training is to ask participants to provide written comments on a course or workshop immediately afterwards and again six months later.

23. Recognition of training activities undertaken by staff may be provided in a variety of formal and informal ways. Attendance at training courses could be included in submissions to promotion committees at the end of probation, at the efficiency bar and in applications for senior

/p.9...

posts. Reports on courses attended outside the institution could be submitted to the departmental meeting and to the committee concerned with academic staff training and development. It is hoped that universities and departments would take account of attendance at training courses when considering applications of staff for established posts and promotion.

24. A favourable climate for training and development helps to ensure that participation in training is taken for granted. It is particularly valuable for senior officers of a university and senior staff of a department to demonstrate their interest in the courses and workshops attended by their staff and in the problems of academic staff training and development. Without commitment on the part of universities and departments, academic staff training will not flourish and a code of practice will remain a theoretical exercise rather than a professional reality.

# APPENDIX NINE

## ACCOMPANYING LETTER FOR SURVEY ON STAFF APPRAISAL

To: Deans of Faculties
Heads of Department
Members of Senate
Chairmen of Staffing Committees
President of Non-Professorial Staff Association
Chairman of Sheffield Asssociation of University Teachers

12 January 1987

Dear Colleague

### STAFF APPRAISAL: BACKGROUND INFORMATION and AN INVITATION FOR COMMENTS

All universities are being asked to include proposals for Staff Appraisal in their current thinking and development plans. There are two main reasons for this. First, appraisal procedures may be of help to members of staff themselves in their own career development. This is a positive and creative aspect of appraisal which, it is hoped, would commend itself to all of us. Second, as spenders of public money, universities may be pressed to introduce such schemes in the context of public accountability. We could not ignore such pressure but could certainly help shape it constructively by coming forward with positive ideas.

Members of Senate will be aware that I have been asked to initiate discussions of staff appraisal within the University. To that end, I have set up and chaired a small working party whose task is to produce a Senate Green Paper for debate later this session. The present document is circulated as a prelude to producing that Green Paper, with the intention of initiating a widespread consideration of this important topic throughout the University prior to Senate's own discussions. It is also intended that this document should encourage departments and individuals to inform the Working Party of views they would like to have taken into account in producing the Green Paper.

The materials attached are*:

1. *(Salmon)* A paper which identifies the main questions that the Working Party thinks must be addressed if the University is to set up a staff appraisal system, together with its own tentative comments on them.

2. *(Yellow)* A description of the appraisal system now in compulsory use for all newly appointed academic staff in the *University of Exeter*.

3. *(Cream)* An example of a staff appraisal form to indicate the sort of information which might be sought.

4. *(Blue)* A review by R C Pennington and M J O'Neill entitled *Appraisal in Higher Education: Mapping the Terrain*

5. *(Pink)* A pamphlet from the Industrial Society aimed at schools and entitled *Staff Appraisal*.

6. *(Green)* An unsigned article from the *Bulletin of Leadership and Academic Training in Higher Education and Research* describing an imaginary dialogue between two heads of department following their attendance at an introductory lecture on staff appraisal.

I would ask Deans of Faculties and Heads of Departments to use this documentation to initiate discussions within their own Faculties and Departments. The documentation is also being sent to other colleagues both for information and in the hope that they too would encourage discussion. The Working Party would welcome comments from all these bodies and from individuals.

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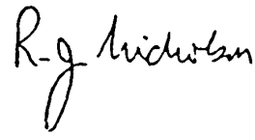
**The Working Party also believes that a good way to ensure adequate debate of this issue might be for each department to present to the Working Party for subsequent incorporation into its Green Paper a description of the kind of appraisal system that it believes would be sensible and feasible for its own needs.** It would be hoped that such submissions would answer or comment on the questions raised in Paper 1 (salmon).

The Senate on 13 May 1987 would seem to be the earliest one that can be allocated for a Staff Appraisal Green Paper. To that end, and bearing in mind the time likely to be needed for analysing and summarising the returns, and preparing the Green Paper, **the deadline for submissions is 25 March 1987.**

May I thank you all for your help and co-operation?



Prof R J Nicholson

*Members of Working Party on Staff Appraisal:*

Dr D M Burley
Prof J P Frisby
Prof E J C Garden
Mrs P A Luker
Mr M McCormick
Prof R J Nicholson (Chairman)

*In order to save on the costs of duplicating lengthy papers, only Items 1 and 2 are being circulated to members of Senate. Should your copy not have these items, in the first instance please ask to see those provided for your Head of Department. Should that for any reason be inconvenient, the full set of papers can be consulted in the office of Mrs P A Luker, Department of Personnel Services (ext 4022).

# APPENDIX TEN

**QUESTIONS REGARDING STAFF APPRAISAL** *12 January 1987*

The following questions, and the tentative comments on them of the *Working Party on Staff Appraisal*, are intended to help promote debate about many important details that would need attention if Senate were indeed to decide in favour of an appraisal scheme.

1. Who are to be the appraisers?

   A top-down scheme? (Eg Heads of department appraise their staff?)
   A peer appraisal scheme?

*The Working Party has no firm views on this question at the present time. It suspects that the needs of various departments will differ according to such factors as size and past history. Replies from departments will, it is hoped, clarify this issue. The Working Party would be particularly interested in hearing any comments, for and against, on the practicality of appraisal by peers.*

2. Who are to be the appraisees?

*The Working Party suggests that in the first instance any scheme should be limited to academic, and possibly academic-related, staff. Experience gained in those areas will be of benefit in future extensions to clerical, technical, and ancillary staff. Is this initial restriction sensible? Comments on this question from committees dealing with the latter staff will of course be sought as part of the current consultation exercise.*

3. How will senior staff be appraised?

*It is commonplace in the literature on staff appraisal to find it said that any appraisal scheme must include, indeed often begin with, senior staff. The guideline seems to be: "No one should be an appraiser who is not himself or herself an appraisee." The Working Party is keen to learn of practical ways of appraising staff at head of department level and above.*

4. What training will be required?

*The Working Party takes it for granted that some training is essential for all staff receiving and delivering appraisal. Clearly some way must be found of keeping this potentially huge and expensive task within reasonable bounds in any given year. The Working Party would be interested to know the minimum training thought justifiable in the first instance. Would familiarisation via circulated literature and talks to each department given by the Staff Training and Development Officer (Mrs P A Luker) be sufficient to get a worthwhile scheme going? Whereas it would appear sensible to the Working Party that any scheme should be instituted on a university-wide basis, nevertheless it might be desirable to have some departments receive more extensive training than that just suggested in the first year, and therefore aim at a more extensive appraisal system. This training could then be given to other departments in subsequent years.*

5. What activities are to be appraised?

*The Working Party particularly invites comment on the activities outlined in the University of Exeter scheme. Need all seven of those activities be appraised in any given year and for all staff? Practical considerations might suggest limiting the scope of the content of appraisal for any given individual in any given year, at any rate in the early years of implementation of an appraisal scheme.*

**6. How often are staff to be appraised?**

*The Working Party believes that an annual exercise is probably most sensible, at any rate in the early stages of implementation. Do you agree?*

**7. What documentation should accompany appraisal?**

*The Working Party takes the view that a written record of agreed goals, and progress towards their achievement over the years, should be part of any appraisal system. Without a written record misunderstandings are almost certain to arise. The Working Party would like to hear views on who should have access to such records. Clearly a basis of confidentiality needs to be maintained but a member of staff's appraiser will almost certainly have to change from time to time. Also, what type of documentation is desirable? A standard form has the benefit of providing prompts about what might be considered but a single form might not suit the needs of all departments.*

**8. Should the exercise be linked to promotion?**

*The Working Party takes the view that the answer to this should be 'definitely not'. To emphasise as far as possible the distinction between appraisal and assessment-for-promotion, it suggests that appraisal should be conducted at a different time of year from assessment. (Appraisal and assessment might also be conducted by different people of course, depending on the type of appraisal system chosen.) Comments on these matters are invited.*

PLEASE SEND YOUR REPLIES TO THE WORKING PARTY ON STAFF APPRAISAL

c/o Mrs P A Luker
Staff Training and Development Officer

To help promote as much open debate of staff appraisal as possible, no replies will be regarded as confidential unless an explicit request is made to the contrary.

IF REPLIES ARE TO BE TAKEN INTO ACCOUNT IN PREPARING THE FORTHCOMING GREEN PAPER ON STAFF APPRAISAL THEY MUST BE

SUBMITTED BY THE DEADLINE OF

**Wednesday 25 March 1987**

# REFERENCES


Abercrombie, M L J and Terry, P M, 1978, Talking to Learn, Guildford, Society for Research into Higher Education.

Abercrombie, M L J, 1960, The Anatomy of Judgement, London, Hutchinson.

Abercrombie, M L J, 1979, Aims and Techniques of Group Teaching, (4th Edition), Guildford, Society for Research into Higher Education.

Adams, R and Biddle, B, 1970, Realities of Teaching: Explorations with Videotape, New York, Holt, Rinehart and Winston.

Adelman, C, 1981, On First Hearing", in Adelman, C (ed), "Uttering and Muttering", London, Grant McIntyre.

Ainsworth, N, 1984, The Cultural Shaping of Oral Discourse, "Theory into Practice" 23, 2. pp. 132-7.

Amidon, E and Hunter E, 1967, Improving Teaching: the Analysis of Verbal Interaction, New York, Holt, Rinehart and Winston.

Argyle, M, 1972, The Psychology of Interpersonal Behaviour, Harmondsworth, Penguin.

Barnes, D, Britton J and Rosen, H, 1969, Language, the Learner and the School, Harmondsworth, Penguin Books.

Bartlett, F C, 1932, Remembering, Cambridge University Press.

Beard, R and Hartley, J, 1984, Teaching and Learning in Higher Education (4th Edition), London, Harper and Row.

Bellack, A S and Hersen, M (eds), 1979, Research and Practice in Social Skills Training, New York, Plenum.

Bellack, A, Klierbard, H, Hyman, R and Smith, F, 1966, The Language of the Classroom, Columbia, Teachers College Press.

Beynon, J and Atkinson, P, 1984, Pupils as Data-Gatherers: Mucking and Sussing, in Delamont, S, (ed), "Readings in Interaction in the Classroom", London, Methuen.

Black, P J, 1972, Group Discussion in the Planning and Reporting of Group Project, in Beard, R M (ed), "Varieties of Group Discussion in University Teaching", University of London Institute of Education.

Blease, D, 1983, Observer Effects on Teachers and Pupils in Classroom Research, "Educational Research" 35, 3, pp 211-17.

Bligh, D A, 1972, What's the Use of Lectures?, D A and B Bligh, Briar House, Clyst Honiton, Exeter.

Bligh, D (ed), 1986, Teach Thinking by Discussion, Guildford, SRHE and NFER Nelson.

Bliss, J, Monk, M and Ogborn, J, 1983, Qualitative Data Analysis for Educational Research, London, Croom Helm.

Blom, J and Gumperz, J, 1972, Social Meaning in Linguistic Structure: Code-switching in Norway in Gumperz, J and Hymes, D (eds), "Directions in Sociolinguistics: the Ethnography of Communication", New York, Holt, Rinehart and Winston.

Braskamp, L A, Brandenburg, D C and Ory, J C, 1984, Evaluating Teaching Effectiveness, Beverly Hills, Sage Publications Inc.

Brown, G A, 1975, Microteaching: Research and Developments in Chanan, G "Frontiers of Classroom Research", Slough, NFER>

Brown, G A, 1978, Lecturing and Explaining, London, Methuen.

Brown, G A and Armstrong, S, 1978, SAID: s system for analysing instructional discourse in McAleese, R and Hamilton, D (eds), "Understanding Classroom Life", Slough, National Foundation for Educational Research.

Brown, G A and Bakhtar, M, 1983, Styles of Lecturing, University of Loughborough, ASTD.

Brown, G A and Atkins, M, 1988, Effective Teaching in Higher Education, London Methuen.

Burgess, R, 1984, In the Field, London, Allen and Unwin.

Cazden, C, John, V and Hymes, D, 1972, The Function of Language in the Classroom, New York, Teachers College Press.

Cohen, L and Manion, L, 1985, (2nd edition), Research Methods in Education, London, Croom Helm.

Combs, M L and Slaby, D A, 1977, Social Skills Training with Children, in Lahey, B B and Kazin, A E (eds) "Advances in Clinical Child Psychology", New York, Plenum Press.

Committee of Vice-Chancellors and Principals, 1985, Efficiency Studies in Universities (Jarratt Report).

Committee of Vice-Chancellors and Principals, 1986a, Academic Standards in Universities (Reynolds Report).

Committee of Vice-Chancellors and Principals, 1986b, Code of Practice on Academic Staff Training in Universities.

Committee of Vice-Chancellors and Principals, 1986c, The Future of the Universities.

Corsaro, W, 1981, Entering the Child's World: Research Strategies for Field Entry and Data Collection in a Preschooling Setting, in Green, J and Wallat, C (eds), "Ethnography and Language in Educational Settings", Norwood, N J, Ablex.

Coulthard, M, 1977, Introduction to Discourse Analysis, London, Longman.

Davies, B, 1983, The Role Pupils play in the Construction of Classroom Order, "British Journal Sociology of Education" 4, 1, pp 55-69.

Delamont, S, 1976, Interaction in the Classroom, London, Methuen.

Delamont, S, 1983, The Ethnography of Transfer, in Galton M and Willcocks, J (eds), "Moving from the Primary Classroom", London, Routledge and Kegan Paul.

Dillon, J, 1982, Cognitive Correspondence between Question/Statement and Response, "American Educational Research Journal, 19, 4, pp 540-51.

Dunkin, M J and Biddle, B J, 1974, The Study of Teaching, New York, Holt, Rinehart and Winston Inc.

Ebbutt, D and Elliott, J, 1985, Why should Teachers do Research?, in Ebbutt, D and Elliott, J (eds), "Issues in Teaching for Understanding", London, School Curriculum Development Committee and Longman.

Edwards, A D and Westgate, D P G, 1987, Investigating Classroom Talk, London and Philadelphia, The Falmer Press.

Edwards, A, 1981, Analysing Classroom Talk, in French, P and MacLure, M (eds), "Adult-Child Conversation", London, Croom Helm.

Elliott, J, 1985, Facilitating Action Research in Schools: Some Dilemmas, in Burgess, R (ed), "Field Methods in the Study of Education", Lewes, Falmer Press.

Elton, L, 1975b, Mature Students: OU and non-OU in Evans, L and Leedham, J (eds), "Aspects of Educational Technology" IX.

Elton, L, 1980, Improvement of Teaching Methods and Student Participation in Synn, I (ed) "The Pursuit of Excellence in Higher Education", Daegu, Keimyung University.

Elton, L, 1984, Evaluating Teaching and Assessing Teachers in Universities, "Assessment and Evaluation in Higher Education", 9.

Elton, L, 1987, Teaching in Higher Education: Appraisal and Training, London, Kogan Paul.

Elton, L, 1987, UGC Resource Allocation and the Assessment of Teaching Quality, "Higher Education Review", 19.

Erickson, F and Mohatt, G, 1982, Cultural Organization of Participation Structures in Two Classrooms of Indian Students, in Spindler, G (ed) "Doing the Ethnography of Schooling", New York, Holt, Rinehart and Winston.

Flanders, N A, 1970, Analyzing Teaching Behaviour, Cambridge, Mass., Addison-Wesley.

Friedrich, G, 1982, Classroom interaction, in Barker, (ed) "Communication in Classrooms: Original Essays", Englewood-Cliffs, Prentice-Hall.

Galton, M, (ed), 1978, British Mirrors: a Collection of Classroom Observation Instruments, Leicester, Leicester University School of Education.

Goldschmid, M L, 1978, The Evaluation and Improvement of Teaching in Higher Education, in "Higher Education", Vol. 7.

Good, T L and Brophy, J E, 1984, (3rd edition), Looking in Classrooms, New York, Harper and Row.

Hale, A, and Edwards, A, 1981, Hearing children read, in Edwards, J, (ed), "The Social Psychology of Reading", Silver Spring, Maryland, Institute of Modern Languages.

Hammersley, M, 1977, School Learning: the Cultural Resources required by Pupils to answer a Teacher's Questions, in Woods, P and Hammersley, M (eds), "School Experience", London, Croom Helm.

Hammersley, M, 1981, Putting Competence into Action: Some Sociological Notes on a Model of Classroom interaction, in French, P and MacLure, M (eds), "Adult-Child Conversation", London, Croom Helm.

Hammersley, M, 1984, The Researcher exposed: a Natural History, in Burgess, R (ed), "The Research Process in Educational Settings", Lewes, Falmer Press.

Hargie, O, 1978, The Importance of Teacher Questions in the Classroom, "Educational Research", 20, 2, pp 97-102.

Hargie, O, Saunders, C and Dickson, D, 1981, Social Skills in Interpersonal Communication, London, Croom Helm.

Hargie, O, 1987, A Handbook of Communication Skills edited by Owen Hargie, London, Croom Helm.

Hargie, O, 1987, A Handbook of Communication Skills edited by Owen Hargie, London, Croom Helm.

Harris, D and Holmes, J, 1975, Open to Martha, Closed to Mary, London "Times Educational Supplement", 14 February 1985.

Heath, S, 1983, Ways with Words: Language, Life and Work in Communities and Classrooms, Cambridge, Cambridge University Press.

Heron, J, 1986, Six-Category Intervention Analysis, (2nd edition), Guildford, Human Potential Research Project, University of Surrey

Hill, F W, 1969, Learning Thru Discussion, London, Sage.

HMSO, 1963, Committee on Higher Education (Robbins Report), London.

HMSO, 1964, Report of the Committee on University Teaching Methods (Hale Report), London.

HMSO, 1968, Standing Reference on the Pay of University Teachers in Great Britain: First Report, National Board for Prices and Incomes, Report No. 98, Cmnd 3866, London.

HMSO, 1985, Development of Higher Education into the 1990's, Cmnd 9524, London.

HMSO, 1987, Higher Education, Meeting the Challenge, Cmnd 114, London.

Hunter, E, 1972, Encounters in the Classroom: New Ways of Teaching, New York, Holt, Rinehart and Winston.

Imrie, B W, 1980, Small Group Development Reference File, University of Queensland, TEDI.

IPM/DES PICKUP, 1986, A Partnership in Learning, London.

Jackson, D and Jacques, D, 1976 Improving Teaching in Higher Education, University of London Methods Unit.

Jaques, D, 1984, Learning in Groups, London, Croom Helm.

King, R, 1978, All Things Bright and Beautiful: A Sociological Study of Infants Classrooms, London, Routledge and Kegan Paul.

Knapper, C K (ed), 1980, Teaching Evaluation and Instructional Development, University of Ontario, Newsletter 26/27 February/March.

Labov, W, 1972, The Study of Language in its social Context, in Giglioli, P (ed), "Language and Social Context", Harmondsworth, Penguin Books.

Libet, J M and Lewinsohn, P M, 1973, Concept of Social Skill with Special Reference to the Behaviour of Depressed Persons, "Journal of Consulting and Clinical Psychology", 40, 304-12.

Lockwood, G and Davies, J, 1985, Universities: The Management Challenge, Guildford, SRHE-NFER Nelson.

Marin, J, 1970, Explaining, Understanding and Teaching, New York, McGraw.

Massialas, B and Zevin, J, 1967, Creative Encounters in the Classroom, New York, Wiley.

Matheson, C C, 1981, Staff Development Matters, Co-ordinating Committee for the Training of University Teachers, Committee of the Vice-Chancellors and Principals.

Measor, L and Woods, P, 1984, Changing Schools: Pupil Perspectives on Transfer to a Comprehensive, Milton Keynes, Open University Press.

Medley, D and Mitzel, H, 1963, The Scientific Study of Teacher Behaviour, in Bellack, A (ed), "Theory and Research in Teaching", New York, Teachers' Colleage Press.

Mehan, H, 1979, Learning Lessons, Cambridge, Mass, Harvard University Press.

Milroy, L, 1980, Language and Social Networks, Oxford, Blackwell.

Moodie, G C, 1986, Standards and Criteria in Higher Education, Guildford, SRHE.

Murray, H G, 1984, The Impact of Formative and Summative Evaluation of Teaching in North American Universities, "Assessment and Evaluation in Higher Education", 9.

NAB/UGC, 1986, Staff Development for Continuing Education, Report from the National Advisory Board and University Grants Committee Continuing Education Standing Committee.

Nash, R, 1973, Classrooms Observed, London and Boston, Routledge and Kegan Paul.

Nisbet, J, 1986, Staff and Standards, in Moodie, G C, 1986, "Standards and Criteria in Higher Education", Guildford, Society for Research into Higher Education.

Northedge, A, 1975, Learning through Discussion in the Open University, in "Teaching at a Distance", Vol 2, pp 10-19, Milton Keynes, Open University Press.

Ogborn, J (ed), 1977, Small Group Teaching in Undergraduate Science, London, Heinemann Educational Books.

Ottoway, A K C, 1968, Teaching in Small Groups in Layton, D (ed), "Teaching in Transition", Edinburgh, Oliver and Reed.

Parlett, M R and Simons, H, 1976, Learning from Learners: a Study of the Student's Experience of Academic Life, London, Nuffield Foundation.

Parlett, M R and King, J G, 1971, Concentrated Study - a Pedagogic Innovation Observed, London, Society for Research into Higher Education.

Pennington, G and O'Neill, M, 1985, Mapping the Terrain, Teeside Polytechnic, NEDI.

Peters, R S, 1973, (3rd edition), Authority, Responsibility and Education, London, Allen and Unwin.

Phillips, E L, 1978, The Social Skills Basis of Psychopathology, New York, Grune and Stratton.

Piper, D W and Glatter, R, 1977, The Changing University, London, University Teaching Methods Unit.

Pollard, A, 1985, Opportunities and Difficulties of a Teacher-Ethnographer: a Personal Account, in Burgess, R (ed), "Field Methods in the Study of Education", Lewes, Falmer Press.

Pollitt, C, 1987, The Politics of Performance Assessment: Lessons for Higher Education, "Studies in Higher Education", 12.

Powell, J P, 1986, Small Group Teaching Methods in Higher Education in Bligh, D "Teach Thinking by Discussion", Guildford, SRHE/NFER Nelson.

Prosser, A, 1980, Promotion Through Teaching,in "HERDSA News", 2(2)

Resnick, L, 1972, Teacher Behaviour in an Informal British Infant School, "School Review", 81.

Rinn, R C and Markle, A, 1979, Modification of Skill Deficits in Children in Bellack, A and Hersen, M (eds) "Research and Practice in Social Skills Training", New York, Plenum Press.

Robertson, I, 1980, Language Across the Curriculum: Four Case Studies, Schools Council Working Paper 67, London, Methuen.

Romaine, S, 1984, The Language of Children and Adolescents: The Acquisition of Communicative Competence, Oxford, Blackwell.

Rosenshine, B and Furst, N F, 1973, The Use of Direct Observation to Study Teaching in Travers, R M W, (ed), "Second Handbook of Research on Teaching", Chicago, Rand McNally.

Rudduck, J, 1978a, Learning through Group Discussion, Guildford, SRHE.

Rudduck, J, 1978b, Interaction in Small Group Work, "Studies in Higher Education", Vol 3, No 1.

Samph, T, 1976, Observer Effects on Teacher Verbal Behaviour, "Journal of Educational Psychology", 68, 6, pp 736-41.

Saunders C,Hargie, O D W and Dickson, D A, 1980, A Procedural Analysis of the Microtraining Paradigm, Nimeo, N Ireland, Ulster Polytechnic.

Simon, A and Boyer, G (eds), 1967; 1970; 1975, Mirrors for Behaviour: an Anthology of Classroom Observation Instruments, Philadelphia, Research for Better Schools Inc.

Sinclair, J and Coulthard, M, 1975, Towards an Analysis of Discourse: the Language of Teachers and Pupils, London, Oxford University Press.

Skilbeck, M, 1983, Lawrence Stenhouse: Research methodology, "British Educational Research Journal", 9, 1, pp 11-20.

Smith, B and Meux, M, 1970, A Study of the Logic of Teaching, Illinois, University of Illinois Press.

Spence, S, 1978, Social Skills Training with Children and Adolescents, Birmingham, England, Mimeo, Tennal School.

Stenhouse, L, 1972, Teaching Through Small Group Discussion: Formality, Rules and Authority, "Cambridge Journal of Education", 2.

Stubbs, M and Delamont, S, 1976, Explorations in Classroom Observation, London/New York, J Wiley and Sons.

Stubbs, M, 1983, Language, Schools and Classrooms, (2nd edition), London, Methuen.

Swinnerton-Dyer, P, 1985, Weighing Out the Pots of Gold, London, THES, 15-11-85.

Travers, R M W, (ed), 1973, Second Handbook of Research on Teaching, American Educational Research Association, Chicago, Rand McNally.

University Grants Committee, 1984, A Strategy for Higher Education into the 1990's, London, HMSO.

Van Hasselt, V B, Hersen, M, Whitehill, M B and Bellack, A S, 1979, Social Skill Assessment and Training for Children: An Evaluative Review, "Behaviour Research and Therapy, 17, 413-37.

Walker, R and Adelman, C, 1975, A Guide to Classroom Observation, London, Methuen.

Watt, I, 1980, The Seminar in Imrie, B "Small Group Development Reference File", University of Queensland.

Wells, G and Nicholls, J, (eds), 1985, Language and Learning, Lewes, Falmer Press.

Westgate, D, Batey, J, Brownlee, J and Bulter, M, 1985, Some Characterisitics of Interaction in Foreign Language Classrooms, "British Educational Research Journal", 11, 3, pp 271-81.

Wragg, E C (ed), 1984, Classroom Teaching Skills, London, Croom Helm.

Wragg, E C, 1972, An Analysis of Verbal Classroom Interaction between Graduate Student Teachers and Children, PhD Thesis, University of Exeter.

Wragg, E C, 1973, A Study of Student Teachers in the Classroom, in Chanan, G, (ed), "Towards a Science of Teaching", Slough, NFER.

# BIBLIOGRAPHY


Abercrombie, M L J, 1966, Small Groups, in Foss, B M (ed), "New Horizons in Psychology", Harmondsworth, Penguin.

Abercrombie, M L J, 1978, More on Learning about Small Group Teaching, "Journal of Geography in Higher Education", Vol 2, 2.

Adderley, K, et al, 1975, Project Methods in Higher Education, Guildford, Society for Research into Higher Education.

Allen, E A, 1965, Group Methods of Teaching in Higher Education, "Educational Review", 18, November.

Argyle, M, 1972, The Psychology of Interpersonal Behaviour, Harmondsworth, Penguin.

Armstrong, M and Boud, D, 1983, Assessing Participation in Discussion: An Exploration of the Issues, "Studies in Higher Education" 8(1).

ASEE (American Society for Engineering Education), 1976, Experimental Learning in Engineering Education, Washington, ASEE.

Ashby, E, 1984, Foreword in Brewer, I M, Learning More and Teaching Less, Guildford, Society for Research into Higher Education.

AVCC, 1963, The Tutorial, An extract from the Report of the Australian Vice-Chancellors' Committee on "Teaching Methods in Australian Universities".

Bales, R F, 1950, Interaction Process Analysis: A Method for the Student of Small Groups, Cambridge, Mass., Addison-Wesley.

Bales, R F, 1953, The Equilibrium Problem in Small Groups, in "Working Papers in the Theory of Action", 2, New York, The Free Press of Glencoe.

Bales, R F, 1970, Personality and Interpersonal Behaviour, New York, Holt Rinehart Winston.

Barker, L J, Cameron, B J and McNutty, L J, 1980, Staff Performance and Assessment in Billings, D (ed), "Indicators of Performance", Guildford, Society for Research into Higher Education.

Beard, R M, 1970, Teaching and Learning in Higher Education, Harmondsworth, Penguin.

Beard, R M (ed), 1972, Varieties of Group Discussion in University Teaching, University of London Institute of Education.

Beard, R M and Bligh, D A, 1978, Research into Teaching Methods in Higher Education, (4th edition), Guildford, SRHE.

Bion, W R, 1961, Experiences in Groups, London, Tavistock.

Black, P J, Dyson, N A and O'Conner, D A, 1968, Group Studies, "Physics Education", 3.

Bligh, D A, 1972a, Evaluation of Teaching in Groups by Interaction Analysis, in Beard, R M (ed), "Varieties of Group Discussion in University Teaching", University of London Institute of Education.

Bligh, D A, 1972b, Small Group Teaching Methods - A Classification, in Beard, R M (ed), "Varieties of Group Discussion In University Teaching", University of London Institute of Education.

Bligh, D A, 1973, Developing Skills for Small Group Work, in Bligh, D A, (ed), "Introductory Course for Lecturers. Volume 11 Background Papers" UTMU, University of London Institute of Education.

Bligh, D, Ebrahim, Z, Jaques, D and Warren Piper, D, 1976, Teaching Students, University of Exeter Press.

Bloom, B S (ed), 1956, A Taxonomy of Educational Objectives: The Classification of Educational Goals, New York, Longmans Green.

Bloom, B S, et al, 1964, Taxonomy of Educational Objectives, Vol. 2, London, Longman.

Bormann, E G, 1975, Dynamics of the Task Dimension in "Discussion and Group Methods", London, Harper and Row.

Boud, D and Prosser, M, 1980, Sharing Responsibility: Staff-student Co-operation in Learning "British Journal of Educational Technology, 1.11. January.

Boud, D, 1981, Developing Student Autonomy in Learning, London, Kogan Page.

Boud, D and McDonald, R, 1981, Educational Development through Consultancy, Guildford, Society for Research into Higher Education.

Boud, D and Lubin, J, 1983, Self-assessment in Professional Education, Tertiary Education Research Centre, University of New South Wales.

Boud, D, Keogh, R and Walker, D, 1985, Reflection: Turning Experience into Learning, London, Kogan Page.

Boud, D (ed), 1986, Learning from Workshop Activities: Extending the Theoretical Base, in Cryer, P, "Training for Teachers in Higher Education", Guildford, Society for Research into Higher Education.

Bradford, L, 1976, Making Meetings Work, Mansfield, University Associates Inc.

Bradley, J, Chesson, R and Silverleaf, J, 1983, Inside Staff Development, Windsor, NFER Nelson.

Bramley, W, 1979, Group Tutoring, London, Kogan Page.

Brewer, I M, 1979, Group Teaching Strategies for Promoting Individual Skills in Problem-Solving, "Programmed Learning and Educational Technology", Vol 16, 2.

Caldin, E G, 1968, The Tutorial, in Layton, D (ed), "University Teaching in Transition", Edinburgh, Oliver and Reed.

Canter, F and Gallatin, J, 1974, Lecture Versus Discussion as Related to Students: Personality Factors, "Improving College and University Teaching", 22(2).

Cartwright, D and Zander A, 1968, Group Dynamics (3rd Edition), New York, Harper and Row.

Chanan, G and Delamont, S, 1975, Frontiers of Classroom Research, Slough, NFER.

Clement, D E, 1971, Learning and Retention in Student-led Discussion Groups, "Journal of Social Psychology, 84.

Cleugh, M G, 1970, Discussion in "Educating Older People", London, Tavistock Publications.

Cockburn, B and Ross, A, 1977, Working Together, "Teaching in Higher Education, Series 3", Lancaster, University of Lancaster, School of Education.

Cockburn, B and Ross, A, 1977, A Kind of Learning, "Teaching in Higher Education, Series 5" Lancaster, University of Lancaster, School of Education.

Cockburn, B and Ross, A, 1977, Patterns and Procedures, "Teaching in Higher Education, Series 6", Lancaster, University of Lancaster, School of Education.

Cockburn, B and Ross, A, 1978, Teaching in Higher Education, No 8: Essays, University of Lancaster.

Coleman, A, 1978, Practical Techniques for Tutorial Teaching, "Journal of Geography in Higher Education", Vol 2, 2.

Collier, K G, 1968, New Dimensions in Higher Education, London, Longman.

Collier K G, 1969, Syndicate Methods: Further Evidence and Comment, "Universities Quarterly", 23.4.

Collier K G, 1980, Peer Group Learning in Higher Education, "Studies in Higher Education", 5.1.

Collier K G, 1983, The Management of Peer Group Learning: Syndicate Methods of Higher Education, Guildford, Society for Research into Higher Education.

Cooper C (ed), 1976, Theories of Group Processes, London, Wiley.

Corey, S, 1940, The Teachers Out-Talk The Pupils, "School Review", 48.

Cox, R J, 1967, Examinations and Higher Education: a Survey of the Literature, "Universities Quarterly", 21.

Cox, R (ed), 1975, Evaluating Teaching in Higher Education, London, University Teaching Methods Unit.

Cryer, P, 1982, 1984, 1986a, Training Activities for Teachers in Higher Education, Vols 1-3, Guildford, Society for Research into Higher Education.

Curtiss, F R and Hurd, P D, 1980, Implementation of Case Study, Role Playing and Small Group Discussion in a Course in Pharmaceutical Law and Ethics, "American Journal of Pharmaceutical Education" 44(1).

Davis, J., 1969, Group Performance, Cambridge, Mass., Addison Wesley.

Davison, A and Gordon, P, 1977, Games and Simulations in Action, London, Woburn Books.

de Bono, Edward, 1977, Brainstorming, in "Lateral Thinking - A Textbook of Creativity", Harmondsworth, Pelican Books, Penguin.

Deutsch, M, 1949, Experimental Study of Effects of Cooperation and Competition on Group Process, "Human Relations", 2.3, also in Cartwright and Zander, 1968.

Dickinson, D, 1968, Changing Behaviour with Behavioural Techniques, "Journal of School Psychology", 6.

Easton, G, 1982, Learning from Case Studies, New York, Prentice Hall.

Eggleston, J, Galton, M and Jones, M, 1975, A Conceptual Map for Interaction Studies in Chanan, G and Delamont, S (eds), "Frontiers of Classroom Research", Slough, NFER.

Elton, L, 1975a, Is it Possible to Assess Teaching?, "Evaluating Teaching in Higher Education", University of London Teaching Methods Unit.

Elton, L, 1977, Staff Development through Self-Evaluation in Elton, L and Simmonds, K (eds), "Staff Development in Higher Education", Guildford, Society for Research into Higher Education.

Elton, L, 1981, Can universities change?, "Studies in Higher Education", 6.

Elton, L, 1982, Assessment for Learning, in Bligh, D (ed), "Professionalism and Flexibility in Learning", Guildford, Society for Research into Higher Education.

Elton, L, 1983, A Model for the Training of Higher Education Staff, Prague, Conference on the Teaching Process in Higher and Continuing Education.

Elton, L, 1986, Research and Teaching: Symbiosis or Conflict, "Higher Education", 15.

Entwistle, N (ed), 1976, Strategies for Research and Development in Higher Education, Amsterdam, Swets and Zeitlinger.

Entwistle, N and Hounsell, D, 1975, How Students Learn: Implications for Teaching in Higher Education in "How Students Learn: Readings in Higher Education, 1, Institute for Research and Development in Post-Compulsory Education, University of Lancaster.

Entwistle, N, 1977, Strategies of Learning and Studying: Recent Research Findings, "British Journal of Educational Studies", XXV.3, October.

Entwistle, N, 1981, Styles of Teaching and Learning, London, Wiley.

Ferguson, G A, 1971, Statistical Analysis in Psychology and Education, (3rd Edition), New York, McGraw-Hill.

Fineman, S and Hamblin, A C, 1978, Teaching Organisational Behaviours through Discussion Groups, "Studies in Higher Education", Vol 3.

Flood Page, C, 1972, Problems in Group Work and How to Handle Them, in Beard, R M (ed), "Varieties of Group Discussion in University Training", University London Institute of Education.

Flood Page, C, 1972, Teaching and Research - Happy Symbiosis or Hidden Warfare?, "Universities Quarterly", 26.

Fransson, A, 1976, Group Centred Instruction: Intentions and Outcomes in Entwistle, N (ed), "Strategies for Research and Development in Higher Education, Amsterdam, Swets and Zeitlinger.

Frederick, P, 1981, The Dreaded Discussion: Ten Ways to Start, "Improving College and University Teaching" 29(3).

Freud, S, 1972, Group Psychology and the Analysis of the Ego, Edited and translated by Strachey, J, 1975, New York, Norton.

Gage, N, 1963, Paradigms for Research on Teaching in Gage, N (ed), "Handbook of Research on Teaching", Chicago, Rand-McNally.

Gage, N, 1968, An Analytical Approach to Research On Instructional Methods, "Phi Delta Kappan", XLIX.

Gall, M D, 1970, The Use of Questions in Teaching, "Review of Educational Research", 40.

Gibbs, G, 1984, Using Role Play in Interpersonal Skills Training: a Peer Learning Approach, in Jaques, D and Tipper, E, "Learning for the Future", University of Loughborough, SAGSET.

Gibbs, G, Habeshaw, S and Habeshaw, T, 1984, 53 Interesting Things to do in your Lectures, Bristol, TES Publications.

Goldschmid, B and Goldschmid, M, 1976, Peer Teaching in Higher Education - A Review, "Higher Education", 5.

Gordon, W J J, 1961, Synectics, London, Harper and Row.

Gordon, W J J, 1971, Synectics: The Development of Creative Capacity, London, Collier McMillan.

Gordon, W J J and Poze, T, 1980b, SES Synectics and Gifted Education Today, "Gifted Child Quarterly" 24(4) Fall.

Gorman, A H, 1969, Teachers and Learners: The Interactive Process, Boston, Allyn and Bacon Inc.

Greenaway, H, 1971, Training of University Teachers, London, Society for Research into Higher Education.

Hall, R, Lund, D and Jackson, D, 1968, Effects of Teacher Attention on Study Behaviour, "Journal of Applied Behaviour Analysis, 1.

Halsey, A H, 1984, Who owns the Universities?, "New Society", 3 May 1984.

Hare, A P, Borgatta, E F and Bales, R F, 1965, Small Groups, New York, Alfred A Knopf.

Hearn, G, 1979, Small Group Behaviour and Development: A Selective Bibliography, in Pfeiffer, W and Jones, J (eds), "Annual Handbook for Group Facilitators", San Diego, University Associates Inc.

Hedley, R and Wood, C, 1978, Group Discussion for Seminar Leaders, Mimeograph, Faculty of Education, University of Manitoba.

Heron, J, 1974, The Concept of a Peer Learning Community, Human Potential Research Project, University of Surrey.

Heron, J, 1981, Assessment Revisited, in Boud, D (ed), "Developing Student Autonomy in Learning", London, Kogan Page.

Higher Education Research and Development Society of Australia (HERDSA), 1980, Statement on the Professional Development of Academic Staff "HERDSA News" 2(3).

Hill, W F, 1977, Learning Thru Discussion, London, Sage.

Hoyle, E, 1972, The Role of the Teacher, London, Routledge and Kegan Paul.

Imrie, B W, 1976, Groupwork in Science and Applied Science in "Small Group Work in University Science Teaching", Centre for Applied Research in Education, University of East Anglia.

James, P E, 1970, Television in Teacher Training, "Visual Education", March.

Jaques, D, 1980, Students' and Tutors' Experience of Project Work in Oxtoby, R (ed), "Higher Education at the Cross-Roads", Guildford, Society for Research into Higher Education.

Jaques, D, 1981, Behind the Scenes, Report to Nuffield Foundation.

Jaques, D, 1985, Evaluation by Teachers, in "International Encyclopaedia of Education", Oxford, Pergamon Press.

Jensen, L C and Young, J I, 1972, Effects of Televised Simulated Instruction on Subsequent Teaching, "Journal of Educational Psychology", 63.

Johnson, D and Johnson, F, 1975, Joining Together: Group Theory and Group Skills, New Jersey, Prentice Hall.

King, C, 1986, The Burden of Appraisal, "Times Educational Supplement", 8 August 1986.

Klein, J, 1956, The Study of Groups, London, Routledge Paperback.

Klein, J, 1965, Working with Groups, London, Hutchinson.

Kremer, L and Perlberg, A, 1971, The Use of Microteaching Techniques to Train Student Teachers in Stimulating Learners' Questions, Israel Institute of Technology.

Kuiper, R, 1977, Group Project Work: a Self Managed 'Learn and Work' Process, in Cornwall, M, Schmithals, F and Jaques, D (eds), "Project Orientation in Higher Education", London, Brighton Polytechnic/University Teaching Methods Unit.

Layton, D (ed), 1968, University Teaching in Transition, Edinburgh, Oliver and Reed.

Lee, A, 1977, A Simple Method for Encouraging Active Participation in Small-Group Discussion Seminars, "Journal of Medical Education", Vol 52.

Lewis, H, 1979, The Anatomy of Small Groups, "Studies in Higher Education", 4.2.

Lewis, R and Mee, J, 1981, Using Role Play: an Introductory Guide, Cambridge, National Extension College.

MacKenzie, N, Eraut, M and Jones, H C, 1971 Teaching and Learning - An Introduction to New Methods and Resources in Higher Education, UNESCO.

Magin, D J, 1982, Collaborative Peer Learning in the Laboratory, "Studies in Higher Education", 7.2.

Mann, R, et al, 1967, Interpersonal Styles and Group Development, New York, Wiley.

Marris, P, 1965, The Experience of Higher Education, London, Routledge and Kegan Paul.

Marton, F, Hounsell, D and Entwistle, N (eds), 1964, The Experience of Learning, Edinburgh, Scottish Academic Press.

Marton, F, 1975, in Entwistle, N J, and Hounsell, D (eds), How Students Learn, University of Lancaster.

Mathias, H and Rutherford, D, 1982, Lecturers as Evaluators: the Birmingham Experience, "Studies in Higher Education", 7.

Mathias, H, 1984, The Evaluation of University Teaching: Context, Values and Innovation, "Assessment and Evaluation in Higher Education", 9.

Matterson, A, 1986, Staff Appraisal and Course Standards, in Colling, C (ed) "Models of Appraisal" SCEDSIP Occasional Paper 323.

McAleese, R and Hamilton, D, 1978, Understanding Classroom Life, Slough, NFER.

McDonald, R and Roe, E, 1984, Reviewing Departments, "Green Guide No 1", Higher Education Research and Development Society of Australasia.

McGrath, J E and Altman, I, 1966, Small Group Research, New York, Holt, Rinehart and Winston.

McIntyre, D, MacLeod, G and Griffiths, R (eds), 1977, Investigations of Microteaching, London, Croom Helm Press.

McKnight, D M, Mitzel, H E, 1956, Techniques for Measuring Classroom Behaviour, "Journal of Educational Psychology", 24.

McLeish, J, Metheson, W and Park, J, 1973, The Psychology of the Learning Group, London, Hutchinson.

Medley, D M and Mitzel, H E, 1963, Measuring Classroom Behaviour by Systematic Observation in Gage, N, (1963), "Handbook of Research on Teaching", Chicago, Rand-McNally.

Miles, M, 1981, Learning to Work in Groups: a Program Guide for Educational Leaders, (2nd Edition), Columbia, New York, Teachers College Press.

Miller, C and Parrett, M, 1974, Up to the Mark - a Study of the Examination Game, Guildford, Society for Research into Higher Education.

Miller, C, 1975, Evaluation of Teaching and the Institutional Context in Cox, R (ed), "Evaluating Teaching in Higher Education", London, University Teaching Methods Unit.

Moodie, G C and Eustace, R, 1974, Power and Authority in British Universities, Allen and Unwin.

Morrison, A and McIntyre, D, 1973, Teachers and Teaching, (2nd Edition), Harmondsworth, Penguin.

National Union of Students, 1969, Executive Report on Examinations, London.

Nisbet, J, 1986a, Appraisal for Improvement, in Stones, E and Wilcox, B (eds) "Appraising Appraisal", British Educational Research Association.

Nisbet, S, 1966, A Method for Advanced Seminars, "Universities Quarterly", 20, Summer.

Northedge, A, 1975, Learning through Discussion in the Open University, "Teaching at a Distance", Vol 2, Milton Keynes, Open University.

Novak, J D, 1977, A Theory of Education, Cornell University Press.

NUS (National Union of Students), 1969, Report of Commission on Teaching in Higher Education, London, NUS.

Nuthall, G A, 1968, Studies of Teaching: II Types of Research on Teaching, "New Zealand Journal of Educational Studies, 3.

Nuttall, D, 1986, What can we Learn form Research on Teaching and Appraisal?, in Stones, E and Wilcox, B (eds) "Appraising Appraisal", British Educational Research Association.

Nyberg, D, 1976, The Coagulation Method of Starting Lecture-Discussion Courses, "Improving College and University Teaching", Vol 24, 1, Winter.

Openshaw, D, 1983, The Appraisal of Academic Staff: The WAIT Experience, Standing Conference on Educational Development Services in Polytechnics, Occasional Paper, 14.

Oppenheim, A N, 1966, Questionnaire Design and Attitude Measurement, London, Heinemann.

Ottaway, A K C, 1968, Teaching in Small Groups, in Layton, D (ed), "University Teaching in Transition", Edinburgh, Oliver and Reed.

Parlett, M, 1977, The Department as a Learning Milieu, "Studies in Higher Education", 2.2.

Pate, R T and Bremer, N, 1967, Guiding Learning Through Skilful Questioning, "The Elementary School Journal", 67.

Powell, J P, 1964, Tutorials without Tutors, "Vestes", 7.

Powell, J P, 1971, Universities and University Education: A Select Bibliography, Vol 2, 1965-70, Slough, NFER.

Powell, J B, 1973 Small Group Teaching Methods in Higher Education, "Educational Research", Vol 16.

Pring, R, 1978, Teacher as a Researcher in Lawton, D (ed), "Theory and Practice of the Curriculum", London, Routledge and Kegan Paul.

Richardson, E, 1967, Group Study for Teachers, London, Routledge and Kegan Paul.

Roe, E and McDonald, R (1983), Informed Professional Judgement, St Lucia, University of Queensland Press.

Rogers, C R, 1951, Student-Centred Teaching in Client-Centred Therapy, Boston, Houghton Mifflin; London, Constable Publishers.

Rosenbaum, M and Berger, M M (eds), 1963, Group Psychology and Group Functions, London, Basic Books.

Rosenshine, B, 1971, Teaching Behaviours and Student Achievement, Slough, NFER.

Rosenshine, B and Furst, N, 1973, The Use of Direct Observation to Study Teaching in Travers, R (ed), "Second Handbook of Research on Teaching, Chicago, Rand-McNally.

Rowntree, D, 1977, Assessing Students: How Shall We Know Them?, London, Harper and Row. Revised edition, 1987, London, Kogan Page.

Rowntree, D, 1978, Educational Technology in Curriculum Development, London, Harper and Row.

Schmuck, R and Schmuck, P, 1979, Group Processes in the Classroom, Dubuque, Iowa, Wm C Brown.

Scholl, S C and Inglis, S C, 1977, Teaching in Higher Education: Readings for Faculty, Columbus, Ohio, Ohio Board of Regents.

Schonell, F J, Roe, E and Middleton, I G, 1962, Promise and Performance, University of Queensland Press and University of London Press.

Shaw, M E, 1971, Group Dynamics: The Psychology of Small Group Behaviour, New York, McGraw-Hill.

Short, A H and Tomlinson, D R, 1979, The Design of Laboratory Classwork, "Studies in Higher Education", 4.2., October.

Smith, B D and Meux, M O, 1976, A Study in the Logic of Teaching, University of Illinois.

Smith, P B, 1968, The Small Group as a Teaching Medium, in Layton, D (ed), "University Teaching in Transition", Edinburgh, Oliver and Reed.

Smith, P B, 1970, Group Processes, Harmondsworth, Penguin Modern Psychology.

Smith, P B, 1980, Small Groups and Personal Change, London, Methuen.

Snyder, B, 1971, The Hidden Curriculum, Cambridge, Mass., MIT Press.

Sprott, W J H, 1958, Human Groups, Harmondsworth, Penguin.

SRHE (Society for Research into Higher Education), Working Party on Teaching Methods, 1975, Project Methods in Higher Education, Guildford.

Stanton, H E, 1978, Small Group Teaching in the Lecture Situation, "Improving College and University Teaching", 26(1).

Stanton, H E, 1982, Improving the University Tutorial, "Improving College and University Teaching", 30(2).

Startup, R, 1977, Staff Experience of Lectures and Tutorials, "Studies in Higher Education", 2.2.

Stenhouse, L, 1975, Introduction to Curriculum Development, London, Heinemann.

Stones, E, 1979, Psychopedagogy: Psychological Theory and the Practice of Teaching, London, Methuen.

Taba, H, 1962, Curriculum Development: Theory and Practice, New York, Harcourt, Brace and World.

Taylor, W and Walford, R, 1972, Simulation in the Classroom, Harmondsworth, Penguin.

Thelen, H, 1963, Dynamics of Groups at Work, University of Chicago Press, Phoenix Books.

Thyne, J, 1966, The Psychology of Learning and Techniques of Teaching, University of London Press.

Treadway, J, 1975, Do Seminars Work?, University of London, Institute of Education Reporter.

University Grants Committee, 1968, Enquiry into Student Progress, London, HMSO.

UTMU, 1978, Improving Teaching in Higher Education, London, University Teaching Methods Unit.

van Ments, M, 1983, Effective Use of Role Play, London, Kogan Page.

Waimon, M and Ramseyer, G C, 1970, Effects of Video Feedback on the Ability to Evaluate Teaching, "Journal of Teacher Education", 21.

Wickelgren, W, 1974, How to Solve Problems, San Francisco, Freeman.

Wilkins, R, 1975, Cooperative Learning in Discussion Groups, "Teaching at a Distance", No 2.

Wilson, A, 1980, Structuring Seminars: a Technique to allow Students to participate in the Structuring of Small Group Discussion, "Studies in Higher Education", 5.1., March.

Wood, A E, 1979, Experience with Small Group Tutorials, "Studies in Higher Education", 4(2).

Wragg, E C, 1970, Interaction Analysis in the Foreign Language Classroom, "Modern Language Journal", February.

Yorke, D M, 1977, Television in the Education of Teachers: A Case Study, "British Journal of Educational Technology, 8.

Zuber-Skerritt, O, 1983, Video in Higher Education, London, Kogan Page.