THE MANAGEMENT OF UNIVERSITIES IN A PERIOD OF RAPID CHANGE: COMPARATIVE CASE STUDIES

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Master of Philosophy

THE UNIVERSITY OF ASTON IN BIRMINGHAM
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Summary

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The orientation of this study is managerial. It focuses on the management of universities in a period of rapid change. The main thrust of this thesis is a comparison of universities in a developed and developing country, represented by Britain and Malta respectively. Through the examination of the challenges facing these universities in the two different environments and their responses to these challenges.

The first part of the study places an emphasis on some of the theoretical concepts of management as they relate to higher education institutions. In particular, it looks at universities as organizations and examines their distinctive characteristics, which account for their limited manageability.

In the second part of this study attention is given to the different developments of higher education in both countries. These developments are analysed with reference to the demands and pressures which were made on the universities since the late 70's. The effects of different environments and of policies for higher education together with different ways of financing and allocating resources have produced specific situations for higher education.

The strategies adopted by five universities are examined in the final part. In a comparative review of these strategies an attempt is made to identify those characteristics or factors which seem to have led to the successful management of change in these universities. These include: increasing adoption of modern management practices and techniques; vigorous and dynamic leadership; flexible organization structures; more competition and collaboration; and greater awareness and response to environmental demands. Similar characteristics have been identified in a number of studies in Britain and America.

The review of the study also indicates that in spite of different economic, cultural and political environments the challenges which are facing universities in the two countries are quite similar, and so to a certain extent are the institutional responses to these challenges.

MANAGEMENT CHANGE UNIVERSITIES

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PART ONE

Some Theoretical Considerations Regarding University Management

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Chapter 3	Universities as Organisations
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Introduction To The Study

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Chapter 1

Introduction To The Study

1.1 The Origin of the Study

The idea for this research project originated in October 1983, after I attended the debate on the Estimates of The University of Malta in the House of Representatives. The Estimates for The University of Malta have for a number of years been debated and approved by the House of Representatives. Since the early eighties it has become common practice for senior members of the Academic and Administrative Staff to be present during these debates. These members of staff are usually expected to give an account of and answer questions on not only on the University's academic activities, but also on its involvement in the economic and social development of the Maltese Islands. These debates are usually transmitted live on the Malta Television service.

Listening to the debate, one could get the impression that there was an attempt by the University to provide the type of higher education and training that was being demanded by the Government. At the same time it seemed that the problems experienced by the University in the process of adaptation and change to its new role, within a short period, were not fully appreciated by the Government.

There was a general agreement among those present for the debate that The University of Malta, being the main institution of higher education on the Island, had a vital role to play in the economic, social and political development of Malta. However, though there appeared to have been a consensus on the need of the University to play such a role, it was not yet clear what form this role should take.

At that time few members of the University staff realized that institutions of higher education in many countries were facing similar challenges and upheavals and they were being subjected to more central direction and control.

Studies on the financing and control systems confirm that many institutions of higher education in Western Europe and North America have entered or are entering a period of financial stringency which is likely to last for the rest of the century. They are increasingly being asked to justify their activities and account for their use of resources not only to external financing bodies but also to other influential groups in society.

In 1980 The House of Commons Education, Science and Arts Committee² stated:

"We need a higher education system which is more accessible, flexible, accountable, and readier to undertake new and unfamiliar roles".

In the debate on the Education Act (1978)³ in the House of Representatives, the Maltese Prime Minister made the following statement:

"We want to introduce two great reforms in tertiary education: first we must make institutions offer those subjects and award those degrees which are useful to the nation; second, we want to create a system which will give everybody the chance to go there".

These are clear examples of how the Central Authorities both in Britain and Malta, although from very different general political perspective, are increasingly controlling the activities of universities and influencing their behaviour.

Furthermore, within institutions consideration is increasingly being given to the efficiency of the various academic and service departments. Decisions are being made concerning the allocation of resources, in some cases involving major cutbacks and reallocations. It seems that University Management may need to have a sound basis upon which to arrive at and justify such decisions. In particular they need to develop and employ appropriate methods for allocating resources and for assessing the performance of the component parts of their institutions 4.

In view of the above, it was felt that a comparative study of a number of universities, analyzing the new demands which are being made upon them, and their response and adaptation to new conditions, could provide useful insights and information on the Management of Universities in a period of rapid change.

Originally, the study was conceptualised as a comparative analysis of the University of Malta and the Universities of Aston and Bath. Later on the Universities of Keele and Salford were included in the project with the aim of grouping a range of management responses so that the studies would throw some light on the type of Management strategies, practices and techniques which are being used in Universities in response to the new demands being made upon them.

1.2 Research Problems/Questions

This Study starts with a number of problems or questions exploring for possible responses. The type of questions which were of interest and which this study attempts to address include:

1. What type of challenges are facing the universities in general and more specifically in Malta and the U.K.?

- 2. What sort of organisations are universities? To what extent, if at all, are they different from other organizations?
- 3. To what extent, could management principles, practices and techniques, as applied for example in some industrial organisations, be also applied to universities?
- 4. How are universities responding to these challenges?
 What changes and innovations have taken place? How
 are the problems of innovation and change being
 tackled in different universities?
- 5. What kinds of managerial and leadership styles have been used to formulate and implement these changes?
- 6. To what extent have staff participated and been involved in this process?
- 7. What new types of organizational structures, if any, have been devised to facilitate the implementation of these changes?
- 8. How is the problem of assessing institutional performance being tackled in these universities?
- 9. How flexible and successful have universities been in adopting to these new conditions?

10. Are there any particular features exhibited by those organisations which appear to have responded successfully to the challenges of rapid change?

The study is based on research carried out in five universities and draws on the literature on Management and Management of change in institutions of higher education. It is divided into fifteen chapters which are arranged in line with the above research problems/objectives. These chapters are grouped into three parts. The first part covers some of the theoretical considerations regarding university management, the next part covers the external environment of universities in Malta and the U.K., and the final part looks at the practical aspects of university management. The remainder of this chapter covers a description of the other fourteen chapters.

1.3 Outline of the Study

The main challenges facing Universities are discussed in Chapter 2, in particular the tightening of external controls, especially those exercised by the Central Authorities. Chapter 3 seeks to establish a theoretical framework for analayzing management in higher education institutions. It looks at some of the models more commonly used to describe the university as an organization and examines those which seem to be more prelevant in a

period of rapid change. It also examines some of the more common characteristics which distinguish universities from other organizations.

The proposition that universities are increasingly becoming like other organizations is put forward in Chapter 4. Their survival may depend to a certain extent in adapting to their needs management strategies, practices and techniques commonly used in other organizations. This chapter also examines the problem of assessing the performance of universities and some of the latest developments in this area. Some progress seems to have been made in the evaluation techniques assessing to a certain degree the effectiveness and efficiency of the operations of a university. To what extent in other words, has a particular university achieved its objectives as defined by its senior management, and at what costs.

Chapter 5 discusses some of the difficulties in defining change in relation to universities. After distinguishing between the private and public life of higher education, some of the constraints of change within the university are discussed. The proposition is put forward that in general universities are unlikely to make quick and dramatic changes unless prompted and prodded by external forces.

The framework of the university system in Britain is examined in Chapter 6. We look briefly at the development of higher education in Britain and go on to examine the Binary System and its implications for universities. Next we look at the role and functions of the UGC and examine how this role has been changing in recent years. Finally we discuss the structure of university government, in particular the role of the Council, Senate, the Vice Chancellor, and the use of committees in universities.

This study is concerned with the management of universities in a period of rapid change. In order to be able to understand and appreciate the reasons for and the implications of the various management strategies adopted, it is necessary to give some account of the external environment in which these institutions operate; and the various external factors and constraints which impinge upon and, to a certain extent, influence their behaviour. Thus Chapter 7 examines in some detail the U.K. Government's policy on Universities since 1979 and provides the background for the U.K. case studies.

Chapter 8 gives an outline of the development of higher education in Malta up to 1980. The changes and developments that took place in the 70's are described in some detail. This chapter provides the background for the Malta case study.

The methodology of the case studies is dealt with in Chapter 9. This chapter gives a description of the research methodology undertaken in each of the five universities, through a combination of interviews, group discussions, questionnaires and document studies. Details are also given about the various personnel who were interviewed. It also gives information about visits and observations undertaken during the research period.

The case studies of Aston, Bath, Keele and Salford are dealt with in Chapter 10, 11, 12, and 13 respectively. In the cases of Aston, Keele and Salford, three of the worst hit universities, the general pattern for the treatment of each case is to look briefly at the development of each of these universities up to 1980 and then to examine in some detail the various strategies adopted by each university after the 1981 UGC Cuts. Since the University of Bath was only marginally affected by the cuts, the bulk of the Bath case deals with the developments of that University during the 70's and an assessment of the various factors which lead us to believe were the main reasons why Bath should have fared so lightly.

Chapter 14 contains the case study on The University of Malta for the period 1980-85. It examines the changes that took place during this period in Malta's Tertiary Education System from the points of view of the Central Authority, the Institution, the various faculties and the individuals.

The final chapter (15) contains a comparative review of the changes which took place in the five universities and also gives the main findings and conclusions of this study. There is an attempt to relate these findings to the research problems/questions which this study sets out to explore, in particular, the range of possible responses by the management of universities in a period of rapid change. Finally, the research findings of a number of similar studies are compared with our research conclusions.

The Challenges Facing the Universities

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Chapter 2 .

The Challenges Facing the Universities

2.1 Introduction

Until the early seventies Universities in most
Western countries were operating in a climate of expanding
economic conditions and were allowed to carry out their
activities with the minimum of outside interference.
However, the economic expansion of the fifties and the
sixties turned into the recession of the seventies and the
eighties. This, together with a number of other factors,
has altered significantly the conditions under which
Universities operate. In this chapter we shall be
examining briefly some of these factors and challenges
facing universities.

2.2 The Tightening of External Controls

As will be seen from our case studies the economic recession has forced Governments in many countries to introduce public policies to achieve rationalisation of human, physical and financial resources in higher education, to foster initiatives that shape university teaching and research to serve the needs of society as defined by the Government and to assist in national recovery. According to Clark Kerr¹

"full autonomy.. to the extent that it ever existed is dead. The greatest change in the governance
(of Universities) now going on, is not the rise of
student power or faculty power, but the rise of
public power. The governance of Universities is less
and less by higher education.. the ivory tower of
yore is now becoming a regulated public utility".

A recent Report of the Carnegie Foundation for the Advancement of Teaching 2 stated that

"Colleges and Universities are expected to respond to the needs of the society of which they are part, while also being free to carry on, without undue interference, in their essential work. Ideally the twin obligations of institutional integrity and public accountability can be kept in balance. In practice, pressures seem continuously to push the campus in one direction or another. At times, excessive demands of society chip away the integrity of the University. At other times, the academy seems unresponsive to public need".

Even though the demands of the society on the universities for education, research and public service are not clearly formulated, universities are increasingly expected to be sensitive to the needs and ideas of society. Any irresponsibility will be liable to awaken a desire for control³.

In Part 2 we will examine in some detail the external environment in which the universities of our study operate. In particular we will see how the Government through its financial constraints is increasing its control on universities and their operation. This will be further illustrated in Part 3 when we look at the individual case studies.

2.3 Impact of Technological Change

The rapid growth of electronic technology in the past two decades is a fundamental development requiring rethinking in many aspects of university education. Three of the many ramifications of the electronics explosion illustrate the impact on the operations of universities. One is the introduction of computers in higher education. As developed economies become increasingly information based economies, with an increasing percentage of the work force engaged in pocessing information of some kind, universities are pressured to have computer equipment, instruction and research. Another aspect of the technological change is the increasing links between Universities and Industry. Science Parks have been established on many campuses including Aston, and now Keele. Industrial Consulting companies have been developed in many universities as well as joint research projects, etc. Many in Universities are quickly coming to realise that in this age of fast technological change cooperation and links with industry are indispensable for survival. Finally, technology is changing our working environment so fast that people in position of responsibility find their knowledge quite quickly becoming out of date. order to meet this challenge Universities are adapting and extending their Continuing Education and Extension Services. Aston University, for example, has set up a Centre for

Extension Education using Tutor Video Instruction (TVI) which enables technical and professional staff to update their knowledge and skills without the disruption of leaving their work to attend courses. Other universities, like Warwick and Strathclyde, have developed advanced courses in Management and related areas where candidates can study for a Masters degree at their home/or work place and attendance at University is kept to a minimum. The Open University has provided similar facilities for the past sixteen years.

2.4 The Demographic Challenge

The University system in the U.K. and many other developed countries faces a demographic change of life. Until recently, the great majority of university entrants came from the 18 and 19 year old age group. This age group is falling in many countries. In Great Britain it will fall by 33 per cent between 1984 and 1996. Projections made by the Department of Science (DES) suggest that demand for full time courses is likely to stay constant or to increase slightly up to 1990 and then fall after that by about 14 per cent by 1996⁴. This demographic change, together with the technological changes discussed above, is forcing many universities to rethink the composition of their student clientele. Opportunities for education

both for career purposes and for greater personal fulfilment could be available throughout life, and this need increases with the pace of technological change. In Great Britain the Government accepts the principle that the provision of continuing education should be one of the principal aspects of the work of universities, but it expects industry and the mature adult to pay for it⁵.

2.5 Increasing Competition between Universities

The changing student clientele and the decrease of financial resources available to universities have combined to increase competition within higher education.

Competition exists for both home and overseas students.

For those administrators and academics hoping to raise the quality of their enterprise in the future, inventive, competetive tactics will be clearly needed. Marketing and Public Relations, usually avoided by Universities, are increasingly becoming popular. Universities have been reticent about putting themselves forward, almost disdainful of the vulgarity of promoting themselves publicly.

Events in the past ten years have forced a change in these attitudes. 'When everyone else is fighting their corner by all means at their disposal, to remain in the dressing room is a betrayal of one's cause'. Many universities

have now accepted the fact that the road to survival now leads through the market place, a new academic revolution is upon us⁷. Marketing in higher education does not mean accepting the values of the market place - properly considered it is an aspect of institutional research, and an acknowledgement that neither academic standards nor autonomy are threatened, but, in fact, they are strenghtened by systematic and objective investigation of the sources of possible change in the environment and by taking the results into account in future planning⁸.

It seems that in the future, if they are to remain successful, universities have increasingly to employ inventive Marketing and Public Relations strategies.

2.6 The Emphasize on Human Resources

Higher Education spends about 75% of its budget on people and yet less attention is given to the management of human resources than to the management of any other part of Higher Education expenditure. The recent Report for Efficiency Studies in Universities concentrates on essentially peripheral areas of university operations, for example, Purchasing, Maintenance, Use of space, etc. It is significant that it neither looked at their core activities, nor at their largest item of expenditure.

These areas were specifically excluded by academic opposition. However, since one of the challenges facing universities is scarcity of resources and how to make best use of those available, Universities are now beginning to look at the problem of how the professional academic staff should be managed.

It seems reasonable to assume that the pressure on resources is going to grow, not dimmish. As a result the premium on enterprise and imagination in managing human resources is going to go up. The demand for accountability and value for money is not going to go away in the foreseable future. Concepts such as organizational analyses and redesign, sharper personal accountability for results, performance appraisal and performance related pay, have already gained acceptance in such previously unpromising parts of the public sector as the civil service, the health service, the police and the armed forces. It would be foolish to assume that their advent can forever be resisted in the universities.

Thus universities in many countries, and particularly in U.K., have entered a revolutionary period. External controls and regulations have increased considerably. Sources of finance and the number of students are changing sharply, and so are the kinds of courses and programmes demanded and their scheduling. The degree of

competitiveness among universities, the technology needed on campus and the nature of faculty are also changing.

Universitites clearly need to plan for these and other challenges and to construct a more active, change oriented management style. What type of organizational model is likely to be adopted to meet these new demands? This topic we will examine in the next chapter.

Universities as Organisations

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Chapter 3

Universities as Organisations

3.1 Introduction

Organisational analysis has exploded during the past thirty years, becoming a mass of approaches with quite different emphases. Organizational analysis comes from different backgrounds: psychology, sociology, economics, and political science, as well as from business and public administration. During the 1970's theorizing about organisations began to take institutions of higher education into account. Analysts studying universities and colleges developed new concepts, or revised and applied old ones, which were appropriate to this domain. In this chapter we will look at some of the more common organizational models which have been applied to institutions of higher education - the bureaucratic, the collegial, the political, the anarchistic and the social systems model. Finally we will examine some of the special characteristics of universities which distinguish them from other organizations.

3.2 The Bureaucratic Model

One of the most influential descriptions of complex organizations was Max Weber's great work on bureaucracies. This model assumes that the institution comprises a formal organization structure, with specified roles, clear hierarchies and chains of command, and predetermined procedures and regulations. It is assumed that the organization works, and people behave, according to the formal structure. According to Weber, bureaucracies are networks of social groups dedicated to limited goals and organised for maximum efficiency. A modern version of the bureaucratic model is the Rational Model of organizations. The Rational Model 2 puts heavy demands on the formalization of organizational structure in the direction of clearly specified roles and procedures.

The most serious criticism of this model has focused on the presumption of rationality which it makes. The limitations on organizational rationality are due either to the limits of the cognitive capacity of the individual, (March and Simon)³, or to unfavourable organizational conditions (Cohen et al)⁴ and (March and Olsen)⁵. Furthermore, (Richman and Farmer)⁶ and (Becher and Kogan)⁷ observe that institutions are much less predictable than this model suggests, because of the many social, psychological and self actualization needs unrecognised in the model, and the

fact that the head does not excercise unequivocal managerial authority. However, in spite of criticism that has been levelled against the Bureaucratic Model, its fundamental elements have, to a large extent, been retained as a predominant form of organisational analysis.

3.3 The Collegial Model

Many writers among whom Millett⁸, Clark ⁹, have consciously rejected the Bureaucratic Model, and instead have declared the university a collegium or community of scholarship. This model assumes a fraternity of scholars seeking individual and collective fulfillment through full participation in decision making. In this model, consensus decision making by academics does not admit of an influential administrative role. This model does tend to ignore the existence of academic hierarchy and academic ritual, and assumes, often wrongly, a genuine spirit of cooperation, deep commitment to the institution, similar shared values and abundant resources.

One of the main criticisms of this model is that consensus building is time consuming and erratic in its outcomes. It can sharpen conflicts, or it can lead to mutual toleration of incompetance and to a neglect of the views of those who are not part of the consensus.

In spite of this criticism, consensual forms of government in most universities have proved quite resilient in coping with the unprecedented financial cuts of 1981; and a substantial reshaping of the system has begun by consent, albeit consent obtained under duress, and not consonant in every detail with the priorities of those who take central decisions about resources 10.

One of the basis of collegiality lies in the need to reconcile the points of view of different technical specialists and divergent interests, by collegial discussion, that is, to make compromise possible 11. As Baldridge 12 and Clark 13 have illustrated, the dominant roles of academic staff as professionals and the fact that most of management is by committees demonstrates the emphasis on collegiality in the university as an organisation. The interactions of the 'bureaucratic' and the 'collegial' elements in the nature of the university as an organization are the main cause of the complexity of the internal structures and pressures, and help to explain the existence of limited manageability 14.

3.4 The Political Model

In many organizations, including universities, the diversity of interests and lack of consistent and shared

goals have been noticed 15. Under these conditions it has been hypothesized that organizations are best understood as political entities, (March and Simon) 16 (Pfeffer) 17, that is, as a system of interacting individuals and sub groups pursuing different interests, demands and idealogies through the use of power and other resources. Thus the success of one actor over another is determined by the amount of power and influence wielded by that actor relative to his competitors. Problem solving activities are characterised by bargaining and compromise.

Thus in contrast with the rational model, the political model views conflict rather than consensus as a normal aspect of organizational life. However, one would hesitate to rely solely on the political model because a great many activities carried out in the university have little to do with the political process. Thus it does not apply to all institutional conditions.

3.5 The Anarchistic Model

Compared to the models already discussed this model is far less a coherent set of concepts or assumptions concerning organisations. In fact, a number of propositions, concepts and metaphors have been proposed by different authors. This model could be described by looking at three

of its well known notions. That is the metaphors of organized anarchy, of garbage cans, and of loosely coupled systems.

3.5.1. The Organized Anarchy Metaphor

Cohen et al 18 argued that any organisation, particularly educational and public organisations, can at least, be partly understood as an organized anarchy. This metaphor refers to organisations with three general characteristics. Firstly, there are inconsistent and ill defined goals and preferences. Secondly, organisation process and technology are unclear and poorly understood by the members of the organisation. Thirdly, there is fluid and part time participation. The members of the organisation vary in the amount of time and effort they devote to different domains; involvement varies from one time to another. These three propositions of organised anarchies are characterized 19 as three kinds of organisational ambiguity. To these three propositions, March and Olsen²⁰ added a fourth kind of ambiguity, the ambiguity of history, that is, the tendency-of organisation members to selectively construct and distort organizational events in the past.

3.5.2. The Garbage Can Metaphor

According to this metaphorical notion, opportunities

for organizational problem solving and choice are viewed as garbage cans into which various issues, problems and solutions are dumped by the participants²¹. Thus a decision is viewed as an outcome of several relatively independent streams within an organization. More specifically, organisational choice is viewed as an outcome of four such streams consisting of problems, solutions, participants and choice of opportunities. Thus if the garbage can model is correct, organisational processes are to a large extent determined by accidental streams of events. The concepts of intention and goal are largely ignored.

3.5.3. The Loosely Coupling Metaphor

The proponents of this model Weick²², March and Olsen²³, have described organisations, especially educational organisations, as loosly coupled systems. According to this metaphor, the elements of an organisation are only weakly connected to each other, for example, administration and faculty; faculty and students; processes and outcomes.

3.6 The Social Systems Model

In terms of general systems theory Bertalanffy²⁴ the university system of a nation functions within and interacts with a supra system, that is the society which comprises that nation. Such a university system also operates within the international system of universities

and adheres to the general role of universities in pursuing, transmitting and extending knowledge through the teaching and research functions. In attempting this role and these functions, each university operates as an interdependent and inter-related part of those social and academic systems.

In itself, each university is an open human system, in that there is a continual process of interaction between the system and its environment which results in readjustment in an attempt to achieve equilibrium in the system. This process of input-transformation-output feedback means that the university system of a particular nation cannot avoid the two way interaction with its wider social environment and this includes reacting and sometimes being forced to respond to public policy issues that inpinge upon it.

Thus the social systems model views organisational processes as spontaneous adaptive responses to internal and/or external demands. The open systems theory in relation to organization was first set out by Katz and Kahn²⁵ who laid out nine characteristics of open systems. These they defined as systems

[&]quot;which maintain themselves through constant commerce with their environment that is a continuous inflow and outflow of energy through permeable boundaries" 26.

The first three characteristics already mentioned are importing, transforming and exporting of energy. Universities import resources, human and material, transform them through the activities of teaching and research, and export them in the form of graduates, knowledge and other services. The fourth characteristic is the cycle of events through which this process is carried out. The fifth characteristic is negative entropy, the system requires motion (adaptability and flexibility) to avoid extinction. The sixth characteristic postulates a drive towards the steady state or homeostasis, through the continuous inflow of materials energy and information while the system remains in dynamic equilibrium. The seventh characteristic is that inputs include information inputs to guide the transformation process. The existence of internal differentiation is the eighth characteristic with a 'tendency towards multiplication and elaboration of roles with greater specialization of function, 27. The high degree of professionalism, subject fragmentation and autonomy in universities make this a dominant characteristic. The final characteristic, that of equi-finality, suggests that certain results may be achieved with different initial conditions and in different ways.

The main object of this short description of open systems theory by Katz and Kahn²⁸ is to show the relevance of some general themes to the understanding of the

university as an organization. According to Kast and Rosenzweig²⁹

"Social structures are essentially contrived. People invent the complex patterns of behaviour that we call social structure, and people create social structure by enacting those patterns of behaviour. Many properties of social systems derive from these essential facts. As human inventions, social systems are imperfect. They can come apart at the seams overnight, but they can also outlast by centuries the biological organisms that originally created them. The cement that holds them together is essentially psychological, rather than biological. Social systems are anchored in the attitudes, perception, beliefs, motivations, habits, and expectations of human beings."

3/7 A Typology of Organisational Models

Each of the organisational models described above emphasizes different aspects of organisational reality. (None of these types are pure forms). Consequently each model can be expected to give only a partial understanding of organisational reality. In order to obtain a more comprehensive understanding of organisations, attempts have been made to combine or relate various models into an over arching framework.

Kogan and Becher³⁰ indicate the linkages which occur because of the functioning of individual managers such as vice-chancellors, directors and registrars, deans and

heads of departments. They operate within both the hierarchy and the collegium through executive offices, committees, and informal political arenas.

Ellstrom³¹ proposed a set of conditions under which each of the four (Bureaucratic, Political, Social Systems, Anarchistic) organisational dimensions is assumed to be particularly conspicuous. The proposed conditions are specified along two dimensions: The first concerns the extent to which the goal and preferences of an organisation are clear, consistent, and shared by members of the organisation. Two extreme values are distinguished within this dimension: the case of clearly stated and shared goals (the consensus condition) is distinguished from the case where the goals are unclear and/or disagreed upon (the conflict condition). The second dimension concerns the degree to which technology and organisational processes are clear and well understood by organisational members. Taken together these two dimensions produce a fourfold table that can be used to classify four models of organizations. The resulting typology, which is an extension of Thompsons 32 classification of decision issues, is shown on the following page, Figure 3.1.

A TYPOLOGY OF FOUR ORGANIZATIONAL MODELS

I Organizational Goals and Preferences

Clear and Shared
(Consensus)

Unclear and/or disagreed upon (Conflict)

Transparent Clear

II ORGANISATIONAL Process/
Technology

Ambiguous Unclear

The Bureaucratic Model	The Political Model
The Social	The Anarchistic
Systems Model	Model

Source: Ellstrom, P.E. Four Faces of Educational Organisations
Higher Education 12 (1983) p.237.

In this integrative model, educational institutions are assumed to involve elements that are consistent with four of the organisational models discussed above. Thus no one model can be viewed as the best model. The four models are viewed as representing different, although complementary, dimensions of educational institutions. It is not implied that all four dimensions distinguished are equally applicable at any one point of time. On the contrary, different organizational dimensions are assumed to be differently salient under different sets of conditions.

Thus, if we accept that there is an integrated model of educational organizations and that this model exhibits various dimensions and characteristics which are salient in particular situations, is there any one dimension described above which is likely to be more relevant in a period of rapid change?

Enderud 33 locates four models (Garbage Can - Negotiation and Political - Persuasion and Legitimation -Bureaucratization) in a phased evolution of policy decision where each has a role to play at a particular time in the delivery of effective policy. Richman and Farmer 34 developed a more comprehensive, open systems approach, with a view to prescription and prediction, coupled with a strong contingency element. In studying a number of British cases Davies and Morgan³⁵ used an extension of Enderud's 56 Model (see Figure 3.2). They found that the incidence of contraction inevitably generates more insecurity and thus more conflict and politicization than in times of plenty or even in a steady state. They suggest that, in general, the Political and Organized Anarchy Models seem to have more affinity with the current situation in higher education.

The sequence shown in figure 3.2 is posited on a view of an evolution of the planning decision which allows consideration of the different stages. There, the early stage which can be characterized as an essentially high ambiguous period (Phase 1) is followed by a political period, (Phase 2), a collegial period (Phase 3), and finally an implementation executive period, (Phase 4). This model reflects and incorporates hitherto alternative views of the institution as an organization.

The changes which took place in the five universities which we have studied will be discussed in detail in Part 3 of this study but overall the Enderud and Davies/Morgan Model can tentatively be used to illustrate the process of policy formation in the four British case studies after the July 1981 UGC Cuts, and in the University of Malta after the Education Act 1978.

The immediate period after the cuts in U.K., and after the setting up of the New University in Malta could be described as the Anarchistic or Garbage Can Phase in which the institution is in a state of shock and disbelief. Then follows the Negotiation and Political Phase. New strategies and plans are formulated to achieve the new role and objectives of the institution. Though the various Phases overlap we consider that the management of an institution is over by Phase 1. when it has spelled out in clear and

Figure

explicit terms its aims and objectives. Phase 3,

Persuasion and Legitimation, is where the proposed plans
and strategies are approved and legitimized by the formal
bodies, for example, Senate and Council. Finally comes
the Bureaucratization Phase, when through executive action
the new policy is modified and implemented in the light of
administrative norms.

All our case studies seemed to have roughly followed this pattern, except Bath which was not given the shock treatment through highly reduced funding. What varied considerably was the time taken over the various phases. At Salford, for example, Phase 3, Legitimation through Senate and Council approval, was reached within six months; at Aston it took nearly two years; whilst Keele was still in Phase 1, Anarchistic Mode, even three years after the cuts.

Stimulants for change in academic institutions come from a number of sources, the most important of which are major crises in finances, enrolments or quality; strong pressure from outside authorities and; vigorous foresighted leadership. Real change must begin with a change of heart and mind in the academic executives, or of a change of academic executives 37, as happened at Keele.

In the universities we have studied external forces, especially Government intervention direct and/or indirect,

played a major part in bringing about substantial changes in the management of these institutions. Where these external pressures combined with an internal vigorous farsighted leadership the change process seems to have been smoother. This may have been due to the fact that high quality leadership was able to overcome institutional inertia and apparently motivate people to recognize the need for long term change and secure their participation in its planning and subsequent implementation.

3.8 Organizational Characteristics of Universities

"The organizational characteristics of universities are so different from other organizations that management theories do not apply to them, or at least cannot be applied to them without carefully considering whether they will work well in academic setting" Baldrige et al., 38.

In recent years, different writers have listed a number of organizational characteristics which they claim make universities unique and different from other organisations.

Their goals are ambiguous and contested. They serve clients instead of working for profit, their technologies are unclear and problematic, professionals dominate the workforce and decision making process³⁹. Other

characteristics of universities are diffuse decision making and severly limited managerial discretion over the acquisition and organisation of inputs, limited measurability, mixture of dependancy and autonomy, diffusion of authority and internal fragmentation. Kerr 40, Lindsay 41, Lockwood 42. Though not listing them as unique features of universities, The Jarratt Report 43 mentions the range of academic activities, professional loyalties, participation and tenure as features which complicate the managerial and administrative process.

Perhaps the characteristic that most limits the manageability of a university as a unified institution is that of internal fragmentation; the existence of a high degree of autonomy of internal units based upon professionalism, specialization, tradition and the nature of activity. In leading American universities the departments are relatively autonomous bodies, their autonomy resting on their claim to a monopoly in a recognized discipline 44.

According to Clark 45

"The primary operating units, generally known as 'disciplines', comprise a whole field of basic or applied knowledge. Disciplines are sub cultures, with roots that run deep and wide, not mere administrative categories which can readily be fused to get a neat chart. This produces an uncommon centrality of each unit compared with organizations in other domains. Each unit can claim primacy in a front line task"

An associated feature is that discipline specialists find it much more congenial to affiliate with other discipline specialists outside their university, rather than people from other disciplines within their own institution. This exacerbates the difficulty of fragmentation and genuine internal dialogue.

In the past, these characteristics might have distinguished universities more sharply from other organizations. We feel that the changes which have been taking place in the past ten to fifteen years have blurred and in some cases eliminated these distinctions. In our studies we found evidence that higher education institutions are increasingly operating in a competetive environment, competing for students and alternative sources of finance. Incentives and reward structures are being slowly introduced to encourage initiative and efficiency. The distinction relating to the measurability of inputs and outputs is less sharp than it used to be. As we shall see in Chapter 4 considerable progress has been made in assessing and evaluating performance in institutions of higher education. On the other hand there are other types of organisations besides universities, which have multiplicity of and sometimes conflicting goals that serve clients instead of working for profit and others whose work force is mainly made up of professionals.

It might appear that the changes which have been prompted by external forces have decreased the distinction between universities and other organizations. At the same time, the Institutions of higher education intensive interelations with its external environment provide one of the reasons for its complexity, differentiation and integration 46.

"The University structure is similarily affected by environmental relationships. Separate units may be established to attract and select students, negotiate with legislatures, interact with alumni and donors of resources, attract research funds from government, place graduates and engage in many other activities relating to specific environmental forces". (Kast and Rosenzweig) 47.

It seems that the more hetrogeneous, dynamic and uncertain the environment the more complex and differentiated the internal structuring of the organization.

This chapter has provided an overview of the literature on the studies of the university as an organization, and the ways in which different disciplinary frameworks can help in the understanding and analysis of the nature and the functioning of the university. It is important that managers in universities should make use of the different frameworks and models to assist them to understand the organisation in which they are working.

In the final section we examined the extent to which universities are special and different from other organizations. Notwithstanding these unique features, we saw also that universities possess characteristics common to most forms of organization and that they are a part of the organizational world. A university exists to accomplish something; it has a purpose. It has to establish internal systems and processes, regulated by the management function, which enables it to use its resources to accomplish the purposes it has established. These topics will be examined in the next chapter.

Some Changes in University Management

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Chapter 4 .

Some Changes in University Management

4.1 Introduction

This Study addresses problems of management and change facing universities both in a developed and in a developing economy. In the past decade universities have been experiencing external pressures for changes in their teaching, research and management practices to align them with public policies. Governments have been introducing public policies, particularly in times of economic recession, to achieve rationalisation of human, physical and financial resources in higher education. They have also used such policies to foster initiatives that shape university teaching and research to serve the needs of society as perceived by Government, and to assist in national recovery.

In our case studies we examine how a number of universities have been responding to these external pressures. We will endeavour to show that in spite of their special characteristics, universities are not fundamentally different from other organisations and that a range of management practices and techniques could, and are being increasingly applied successfully to universities.

In this chapter we examine briefly the Management process and its applicability to universities and then examine some of the problems related to defining the mission and purpose of a university, and the difficulties of assessing institutional performance and progress.

4.2 The Pressure for University Management

A number of writers have maintained that since the organisational characteristics of academic institutions are so different from other organizations, Management theories and practices do not apply to them. On the other hand, in recent years, a number of writers have been advocating the application of management practices and techniques to institutions of higher education.

In 1977, Richard M. Cyert wrote

"It is ironic that management which has been a dirty word on most campuses is our major hope for the future. We must have people who understand academic values and who themselves are scholars and educators leading our departments and universities. But it is critical that these same people understand how to manage, particularly contracting organisations. There is no alternative if we were to be masters of our souls".

Cyert considers that academics resist being managed by expert managers and seek to have an academic in top position. For many in higher education the instinctive reaction has been that there is something distinctive about the nature

of higher education which makes the concept of its management particularly inappropriate.

Management is usually associated in many people's minds with industrial and commercial organizations. Originally this was the case. Management and organization studies arose specifically to provide greater coordination and efficiency for corporations with intricate mining and manufacturing operations as in the works of Henri Fayol, Fredrick Taylor and Elton Mayo, or for extensive complex transport and communication enterprises like the railways and telephone companies as in Chester Barnard's case. It seems that in general, management studies were linked originally to profit making organizations.

Organization Science developed through scholars like James March, Richard Cyert and the psychologist Herbert Simon, and later on the Human Relations school of organizational analyses developed through Chris Argyris, Douglas Mc Gregor, Keith Davis, William F. White, Abraham Maslow and many others.

Industry, the child prodigy of rationality and science has increasingly assumed leadership role in the search of solutions to the problems of man's psychological needs.

In contemporary society, business is the dominant institution

In most developed countries the move is away from manufacturing organizations, to service companies, government agencies, non-profit organizations and the production of services. In the United States, for example, one in six professionals is employed in non-profit organizations, Non-profit organizations are the fastest growing sector of the economy⁵. We no longer live in an industrial or business society, but in a multi institutional society. This means that management is no longer business management but is now a core concern for all contemporary organizations and this includes colleges and universities.

Since colleges and universities are the main centres for research and new ideas, which are expected to drive the economy and culture in new directions, and since they are the principal source of professionals, political and economic leaders of tomorrow, they will no longer be allowed to remain 'organized anarchies'. The institutions which train professionals can no longer be run by amateurs.

The management of non-business institutions will indeed be a growing concern from now on. Their management may well become the central management problem, simply because the lack of management of the public service institution is such a glaring weakness. If they are to meet effectively the challenges that face them, higher education institutions must learn to manage themselves. In our studies at Aston, Bath, Keele and Salford, and even at the University

of Malta, we found that this is exactly what has begun to happen. Modern management is coming to the university, slowly, begrudgingly but coming. We have noted earlier (Chapter 3) that institutions of higher education are characterized by goal conflict rather than by a striving for goal congruence. They have joint inputs and multiple outputs and outcomes, the ultimate impact which is extremely hard to measure. It has been suggested by Sizer that not only is it difficult to develop long term planning systems and resources allocation models, but also performance indicators which measure the effectiveness and efficiency of the institution as a whole. We now examine the problems of defining operationally the missions and purpose of a university.

4.3 Operational Definition of Mission and Purpose

One of the challenges facing universities is that like most other organizations they are being forced to consider the problem of resource allocation. In this context the objectives of education need to be clear. They are however neither clear nor consistent. Craven and others list at least five different views on the objectives of education.

The first view is that the purpose of education is to enrich the individual, that education is ipso facto a

good thing, and that educationalists are the best judges of what constitutes good education. A second view, put forward by social scientists, has articulated the connections between culture education, resource allocation and the economy. They maintain that too many educational resources are being directed towards individual enrichment and too few towards vocational training. The third view is the Marxist's interpretation. This is that in capitalist economies it is largely functionalist. It supports not only the status quo class division but also the capitalist economic system. A fourth view sees the education system as the provider of high incomes for the middle classes. Finally there is the economist view of education, as consumption for the individual recipient in terms of pleasure, knowledge and personal benefit, and as investment when the recipient uses the acquired knowledge to improve output in paid productive activity.

The problem of conflicting missions and goals applies also to universities. The operational definition of objectives and the measurement of achievement towards these objectives has been a perennial problem facing universities and until this is solved the dream of planning towards long range goals and budgeting for results remains unfulfilled. Until the goal question is resolved and meaningful priorities set for institutional policy as a whole, it is impossible to say what is really important for that institution and

hence where resources should be allocated⁹. Goals must be clarified, programme priorities decided and difficult decisions implemented.

"There are still many in academe for whom the very word 'objectives' sends shivers down their spines. Educational objectives tend to have to be vague in order to secure agreement, which means we may construct a splendid general policy but find it almost impossible to gain support for any known way of implementing it"10. Birley

In his Leverhulme paper, Burton R. Clark 11 warns us to avoid formal statements of purpose 'like the plague'. They are, he reckons,

"official rhetorics that serve in many ways, ideologies that legitimate a sector in the eyes of outsiders, doctrines that help link participants and improve their morale, warm blankets thrown over the cold bed of self-interests".

Nevertheless, as any student of Management knows, organisations are formed and exist to achieve certain aims and objectives and the management process offers one of the best known ways of attaining them.

The term 'management' can be and often is used in several different ways. For instance, it can simply refer to the process that managers follow to accomplish organizational goals. It can also be used, however, to refer to a body of knowledge. Management can also be that term used to pinpoint those individuals who guide and direct organizations.

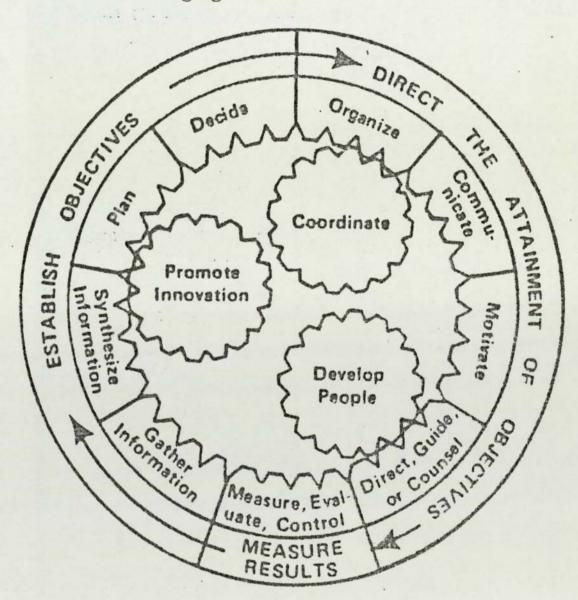
A comparison of a number of definitions of management offered by several contemporary thinkers 12 shows that there is some agreement that management has the following three main characteristics: (1) Management is a process or series of continued and related activities; (2) Management involves and concentrates on reaching organizational goals; and (3) Management reaches these goals by working with and through people and other organizational resources.

"There is no idea more important to management than goals. Management has no meaning apart from its goals"13.

The importance of objectives and goals has been emphasised in a study carried out by the Association of Consulting Management Engineers and reported by the Business Management Council 14. The study concluded that management consists of three steps, viz., establishing objectives, directing the attainment of objectives and measuring results.

Figure 4.1 shows the management wheel which resulted from the study. The three major steps in managing are divided into their twelve elements. Thus instead of defining management by general terms, or by citing a list of functions that the manager carries out, management is now defined as comprising three major steps, all highly

re4.1 Elements of managing.



Source: Business Management Council, New York.

oriented towards objectives. Now the former main functions (plan, organize, control etc.,) are subfunctions of the three larger steps.

This change in emphasis and the rational leading to the change have brought about some far-reaching changes in many of the traditional approaches to the manager's job. One of these changes is the major distinction established between 'running' an organisation and 'managing' an organisation. Those who 'run' organisations are usually frantically busy doing many different things, or in the case of some universities doing very little and hoping that something will happen. Those who 'manage' an organisation make things happen by deciding what they should be doing and then lining up all their resources and actions to make it happen. We trust that this distinction between running an organisation and managing an organisation will be fully illustrated in our case studies.

Writers on organizational strategy have suggested several ways of classifying organizational objectives and goals. Perhaps the best known categorization is that of Peter Drucker 15. He observes that a well-managed business has objectives and goals in the area of market standing, innovation, productivity, physical and financial resources, profitability, managers performance and development, workers performance and attitude and public responsibility.



Drucker's list is intended for business organizations.

A different viewpoint is needed for universities, governmental agencies and other non-profit organizations. Warren Bennis 16 has suggested that all organizations should attempt to achieve objectives of six basic kinds.

- 1. Identification (of the organization's purpose and mission)
- 2. Integration (of individual and organizational goals)
- 3. Social Influence (equitable distribution of power)
- 4. Collaboration (the control of conflict)
- 5. Adaptation (to environmental changes)
- 6. Revitalization (to combat decline and decay).

If the goal categories suggested by Drucker, Bennis and others 17 are synthesized we see that organizational objectives and goals focus on four major areas, viz., financial and other monetary measure; environmental relationships; participants within the organisation and survival.

In recent years a consensus has been growing among academic leaders that aims and objectives setting on which operational plans could be formulated is an indispensable condition for the sound management of their institution.

In 1980, the House of Commons Select Committe 18 recommended:

"that each institution of higher education should prepare itself a statement of its present position within the spectrum of higher education and position it aspires to hold five and ten years hence. The process of preparing such development strategies would involve an assessment by the members of each institution of its fundamental purposes and its place in the spectrum of higher education".

"If institutions were forced to subscribe to mission statements as in the United States, the development of a strategy tailored to their needs would be much easier". Shattock 19.

According to John M Ashworth, vice-chancellor of the University of Salford,

"Universities would benefit from purposeful management and from clear and explicit statements of their aims and objectives in managerially useful terms"20.

The strategic planning approach advocated here should enable institutions to develop a set of alternative strategies and operating plans including strategies for long-term resource mobility. As changes occur in the environment strategies can be narrowed down and the appropriate strategy and operating plan implemented. Under conditions of financial stringency and uncertainity, institutions may need to complement their long-term strategy for resource mobility with a short-term strategy for financial emergencies and a medium-term strategy for financial mobility.

Thus, as can be seen from the above, and fully illustrated in our case studies, the leaders of many of our universities are understanding and accepting the necessity of setting aims and objectives in operational terms. Though these do not dismiss the uncertainity surrounding university management and planning, they assist in understanding and overcoming the nature of that uncertainity. Academic leaders are accepting the responsibility for the establishment of strategic guidelines concerning the strategic shape of the institution and the areas of growth and contraction 21.

Earlier in this study we discussed the various challenges to the role, mission and academic directions of the university. Universities cannot stand still, and thus a major priority is the search for means of ensuring that quality and flexibility can be maintained and improved. New areas of academic and practical inquiry need to be given headroom to develop. This is clearly more difficult in a state of declining resource base. All this implies choices and explicit statements which are clearly more easily and systematically exposed when a specific statement of the role and mission of a particular university has been evolved which can be used for operational and managerial purpose 22.

Since the late seventies, many institutions of higher education in Western Europe, including the five universities of our study, have entered a period of financial stringency. They are increasingly being asked to justify their activities and account for their use of resources in terms of their effectiveness and efficiency. Within institutions consideration has to be given to the efficiency of the various academic and service departments and to decisions concerning the allocation of resources which in some cases might involve major cutbacks and reallocations. To arrive at, and to justify, these decisions, management need a sound basis, in particular, they need to develop and employ appropriate methods for allocating resources and for assessing the component parts of their institutions. Inevitably, there is a demand for performance indicators, which will aid this process, and for relevant financial, quantitative and qualitative information, for planning, decision making and control.

Since university managers seek to improve institutional performance through minor alterations in the pattern of resource allocation, their principal information need is for evidence about the effectiveness and efficiency of past and current resource use. Effectiveness can be taken to refer to the extent of goal achievement. While efficiency can be taken to refer to the extent to which the level of

output has been produced at least cost. Effectiveness may be seen as doing the right thing, while efficiency is doing the thing right 23.

The notion of institutional performance encompasses these two concepts: effectiveness which links outcomes with goals or intended outcomes, and efficiency which links outputs with inputs. The use of the terms performance invokes the notions of 'accomplishment', 'attainment' and the 'execution' of a task²⁴. Hence assessing institutional performance involves asking how well the institution is carrying out its functions. In other words how effective is the institution in attaining its goals and how efficiently it uses its resources in the process.

We have already noted that the measurement of effectiveness is more onerous due to the multiplicity and ambiguity of educational goals. The available efficiency measures are imperfect because of their narrow focus on the readily quantifiable (e.g. no of publications, student employability, amount of funded research, etc.) to the exclusion of more important but intangible outcomes (e.g. academic staff output in teaching and research). Nevertheless it is no longer possible to ignore the pressures exerted on higher education to produce information on effectiveness and efficiency. This information is required to satisfy the demands for accountability and it is also aimed at improving higher education's ability to make

better use of its scarce and diminishing resources.

Performance Indicators for Universities have proved difficult to devise. The Jarratt Report lists twenty performance indicators (Appendix A) classified under three headings; internal, external and operating performance indicators.

In the previous section we have seen that university management is concerned with establishing objectives, evaluating the effectiveness of the university against those objectives and devising a planned strategy to maximise future effectiveness. This should be done in the context of expected charges both in the internal and external environment.

The National Data Study²⁶ suggests that there are two major sets of (cross-cutting) objectives which need to be considered: the balance to be struck between teaching effort and research on the one hand and, on the other, the relative importance of academic excellence compared with other objectives of which perhaps economic relevance (in either teaching or research) is the most significant.

To draw up plans, and to evaluate performance against them, requires information about achievements as measured against the aims of the plan. There are no wholly adequate or even agreed measures of effectiveness; however, a

number of factors can provide indications. For an (implied) academic objective of excellence and indication level of teaching effectiveness is sometimes thought to be reflected in the views of students as measured by their 'A' level grades on entry. For research, excellence can be reflected in papers published in referred journals, but is more often assessed by peer judgement. For an implied economic objective of relevance, some indication of the effectiveness of teaching might be reflected in the employability of graduates, for research relevance effectiveness might be reflected in the amount of external funding. Although the first two factors tend to be considered more as indicators of excellence and the second two of relevance, there is likely to be an element of both in all four. Figure 4.2 shows a number of performance indicators in relation to academic excellence and economic relevance as applied to teaching and research

Figure 4.2

TYPOLOGY OF PERFORMANCE INDICATORS

	TEACHING	RESEARCH
ACADEMIC EXCELLENCE	'A' Level Entry Grades	Papers Published
ECONOMIC RELEVANCE	Employability of Graduates	Externally Funded Research

Changes in the four indicators shown in Figure 4.2, together with changes in the number of academic staff, in student population, and the proportion of higher degrees awarded over the period 1980-1985 have been used in our case studies to obtain an overall picture of the changes which have taken place in these universities mainly in response to external pressures. Due to a different political, social and economic environment, different criteria had to be used in the case of the University of Malta.

One of the problems with performance indicators is that they are likely to focus on readily quantifiable objectives to the exclusion of more important intangible outcomes. Another problem which could arise is that too much emphases on short term cost efficiency could be at the expense of the institution's long term goals and objectives. This is not to say that short term cost efficiency is not important and performance indicators not relevant. It is a question of balancing short term cost efficiency with long term effectiveness.

In the past twenty years different methods of institutional performance assessment have been developed. Two of the more common approaches are briefly discussed. The first one is the Comprhensive Study Approach which involves making assessment in relation to a number of dimensions of institutional performance. An example of

of such a study is that of the State University of New York undertaken by V.J. Baldridge 27.

The dimensions usually include: purposes and goals; physical and financial resources; administrative leader-ship and financial management; faculty attributes and performance; research and public service; relations with government and community and other topics.

The primary evaluation technique used is the professional judgement method which assumes that expert opinion of one or more qualified professionals provides the best evaluation. The main shortcomings of this approach is that the dimensions of institutional performance generally lack a theoretical or empirical foundation and any direct relations to the notions of effectiveness and efficiency. The results are generally fragmented, subjective, unreliable and costly.

The second approach is to undertake institutional comparison. For a number of institutions, which have similar goals and technology, comparisons can yield useful assessment of their relative effectiveness in achieving their objectives. Our study is an example of this approach. Peterson suggests that the inter-institutional research field is being supported by progress in three areas,

"the development of major standardised instruments that have institutional norms and available distribution channels, the growth of large scale institutional data bases and related exchange procedures that make institutional based data more available, and the emergence of computer networks with more sophisticated software for improved access and ease of data sharing28.

Inter institutional research includes 'descriptive' studies which compare results on particular characteristics, and 'analytic' studies which involve examining the relationship between variables across a set of institutions, Lindsay²⁹. Our study is mainly of the 'descriptive' type.

The inter institutional comparison approach is still emerging. Establishing data bases and exchange procedures is a formidable task in such studies. Groups of institutions can cooperate in this endeavour or central government agencies, for example the University Grants Committee, can provide a suitable mechanism. Sizer 30, suggests that such an agency would undertake a number of tasks:-

- establish and agree with participating institutions a detailed data element dictionary;
- design and agree with participating institutions a a methodology for collecting data;
- c. collect and check the actual data;
- d. calculate, tabulate and evaluate input and output measures and performance indicators to participating and performance indicators to participating institutions;
- e. assist the management of the participating institution to interpret their data, and
- f. undertake a continuous programme of education in the use of inter institutional comparisons.

The comparison should enable the management of an institution to determine where and possibly why its performance differs from that of other institutions but it will not necessarily tell it how to improve it 31.

This approach also has its shortcomings, the main ones being that of ensuring comparability, adequately quantifying the variables involved and overcoming institutional reservations about information sharing.

A number of problems must be solved if assessment of institutional performance is to contribute to its improvement. A better conceptualisation is required for institutional performance, and for the inputs and outputs. Better measurement techniques and judgement procedure are needed. The information provided by institutional performance assessment must be better related to management's needs.

Inspite of these shortcomings, efforts to assess institutional performance cannot be postponed until better methods are available; at the same time the limitations of the existing methods must be fully recognised.

The Dynamics of Organisational Change

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Chapter 5

The Dynamics of Organisational Change

5.1 Introduction

The main aim of this study is to analyze in some detail the way a number of universities have responded to the various challenges which faced them in the past decade, resulting from increasing Government controls, of a direct nature as in the University of Malta or 'indirectly' as in the case of the British universities. The object is to try and find out which particular characteristics or features are likely to be more significant, in the management, planning and implementation of change in universities.

The subject of adaptation and change is perhaps
the most important but also the most intractable area
with regard to the management of universities. It is so
important, because universities are under pressure to
change even more if they are to remain socially relevant
and intellectually vital. The sources of external pressure
to change and adapt are many - the cuts in public expenditure;
the need for selectivety and specialization that flows
from these cuts; the decline in the number of 18-year-olds;
the requirement to attract new students, who may be less

conventional in terms of entry qualifications, age, job
pattern and so on, a requirement which flows in its turn
from this decline; the knowledge revolution, particularly
in its technological aspects; shifts in the structure of
occupations with radical implications for demand for new
and old forms of higher education. These external factors,
and the increasing changes in the scope and structure of
academic knowledge, mean that the pressure on universities
to change and adapt will be greater than ever in the next
fifteen years, and the system's ability to adapt quickly
and thoroughly enough will be the key to its future health,
and, in the case of particular institutions, their survival.

One of the main reasons why the subject is so intractable is the difficulty about agreeing on adequate definition of "change". Here it is useful to bear in mind Martin Trow's valuable distinction between the private and the public lives of higher education. In higher education's private life the advancement and improvement of knowledge through research and teaching there is little evidence of resistance to change. Perhaps the most obvious dynamism can be seen in the natural sciences - physics in 1985 is not the same as physics in 1960, a similar, perhaps less radical process of change has been at work in the non-science disciplines as well. So a reasonable conclusion might seem to be that higher education's reputation for rigidity and resistance to

change is the result of the habits of its public life - the administrative, political and even social structure.

It is perhaps this sort of distinction between the private and public life of higher education which led T.M. Hesburgh² to remark that:

"the university is among the most traditional of all institutions of our society and, at the same time, it is the institution most responsible for the changes that make our society the most changing in the history of man".

How can it be that the university, and indeed the higher education system at large, is sluggish, even heavily resistant to change, in its public life?

5.2 Constraints on Change in Universities

Universities left to their own devices may not produce the radical changes required. It is not only the deadening hand of bureaucracy at the centre that inhibits change and prevents flexibility. Vested interests within institutions can be just as destructive. Kogan and Boys highlight the power of academic departments within institutions for preserving their economic and intellectual interests. Within the universities there are a range of constraints on change. These include attitudes to tenure

convictions that planning stifles creativity and the view that planning and consensus are inimical to each other⁵.

It is useful at this stage to keep in mind the difference between the emergence of and educational system as a major form of change and the later alterations of a system once it is in its place⁶.

"as a system develops over time, it builds its.own sources of continuity and change. The system always grows larger, and, in any case, it becomes more complex. It acquires structure of work, belief and authority, Budgets become entrenched, personnel fixed in categories, costly physical plants are turned into sunk cost. Institutions and sub sectors become rooted, powerful interests with their own traditions and rationales. The system becomes deeply institutionalized, with growing bureaucratization and professionalization means that constraint upon change are now increasingly centred in the system". Clark B.R.7

Thus, developed systems of higher education, like the two included in this study, will be full of constraints upon change. Becher and Kogan⁸ concluded that:

"many changes, included those generated from within, fail because they are unable to accommodate to existing structural constraints, academic structures and regulations for the most part evolve to protect the legitimate interests of researchers and teacher. They help to define and also defend, the main areas of professional concerns within an institution. But once established, they can prove surprisingly intractable".

The conservatism of higher education is contextual. Our study lead us to agree in general with the above findings, and that if there were no social pressure for continual

renewal, the universities might follow the path of least resistance and ignore the new challenges.

The changes which took place in the universities of Aston, Keele and Salford were mainly prompted by external pressures, the main one being that their financial grant was cut by an average of about 36% over the period 1981-1984. Another pressing factor was the demographic change for the 18-year old age group that suggests that demand for university places from this age group may well go down considerably after the 1990's

In the case of the University of Bath the changes were less dramatic and took place much earlier. Though the changes at Bath were generated internally these were mainly due to perceived changes in the environment. As will be seen the the Bath case (Chapter 11) one of the main reasons for the changes was farsighted management which not only made strategic management and long term planning one of its priorities, but also created an appropriate type of organizational structure with which the plans could be implemented and the objectives achieved.

Thus, in general it can be said that the management at Bath was proactive, by forecasting future challenges and pressures, for example the demographic decline, and and lining up their resources to meet the challenges.

On the other hand, at Aston, Keele and Salford the

management was reactive, in the sense that changes were mainly made after the external pressures in the form of UGC cuts were announced.

In the case of Malta, again it was external pressures which forced the changes in the higher education system. These pressures were in the form of direct government intervention which, through The Education Act 1978 10, created The New University in which the changes prescribed by Government were to be introduced.

The intractability and conservatism of an established educational system can perhaps be illustrated by the attitude of most of the members of the 'old' University of Malta. Since they did not agree with many of the changes which were being introduced and the way they were being introduced, once they felt themselves powerless to oppose them, they gave up their post at the University and many sought employment in higher education institutions abroad.

5.3 Responses to Pressures for Change

Universities, like any other open system (see Chapter 3), are continually being impinged upon by external forces that create tensions within them. Similarly within the system, actions of any one part will create tensions for all other parts with which it is interrelated 11. In a period of contraction when an institution is forced to shed anything up to 35% of its staff within a relatively short period such tensions are likely to be greatly magnified. The combination of external pressures and actions within the system leads Olsen 12 to conclude that social systems are 'constantly tension riddled'.

In less hectic times, the term 'tension riddled'
might appear to be somewhat strong, but in the turbulent
early eighties it is a fair description of how universities
are dealing continuously with forces from both within and
from without and is relevant to understanding how these
institutions are responding to the impetus of change.

Olsen 13 has classified the organizations' responses to these pressures in two categories which he labelled 'morphostasis' and 'morphogenesis'. The former occurs when the system tends to preserve through various actions its present condition and overall state; the latter occurs when the system responds with adaptation and change of significant dimensions.

The initial response to tension is to maintain the status quo to muster all the actions that characterise the process of morphostasis. An effort is made to maintain overall stability and unity by balancing

input and output, by introducing adjusting actions and equilibrium maintenance actions. This is what seems to have taken place at Keele, at least until 1984, and to a certain extent at the 'Old' University of Malta. On the other hand, morphogenesis calls for some measure of system change or growth as it develops towards increasing order, unity or operational effectiveness. This is roughly the process that took place at Aston and at Salford after the UGC Cuts.

"When several systems are subjected to change, the sequence is one of progressing from one equilibrium through a phase of disorganization to another equilibrium at a new level. Universities like other organizations, seek equilibrium, a stable relationship among its parts and between itself and its external environment" 14. Herbert.

The upsetting of equilibrium and subsequent efforts to achieve a new equilibrium is a complex process involving in most cases not only the internal structures, illustrated in our case studies by the new committees introduced at Aston, Salford and Keele, but also the sociocultural environment. In this setting, a change in the position of one institution, up or down the 'league table' affects the position of all other members of the set. Competition among institutions will be accentuated, if there is fear that the bottom half a dozen or so in the table will be relegated or abolished, as is feared by many British universities.

Another impetus for change is that the turbulent environment required the development of relationship between dissimilar organization. The increasing relationships of universities with industrial, commercial and other types of organizations, including educational ones are fully illustrated in our studies.

5.4 Patterns of Organisational Change

According to Herbert 15 there are three types of organisational change; intentional, imposed and adaptive.

Intentional change refers to planned modifications in procedures, structures or attitudes arising from decisions made by the institution's management to meet certain perceived problems. The changes at the University of Bath during the seventies fall into this category.

Imposed changes are alterations in procedure that do not originate internally but are determined by someone or something outside the boundaries of the organisation that must comply with the change. The changes carried out at the University of Malta fall into this category and so, to a certain extent, do the changes at Aston, Keele and Salford.

Adaptive changes are the 'creeping' gradually developing changes that occur in response to perceived needed adjustment in practices or activities. These are often haphazard and informal. B.R. Clark ¹⁶ considers this 'creeping' or

"incremental adjustment as the pervasive and characteristic form of change. Since tasks and powers are extensively divided, global change is very difficult to effect".

These divisions are useful in suggesting the limits that may be set on institutional response. Under planned change, such as the introduction of a new degree programme, the limits are only those defined by the imagination and resources of the institution. Under imposed change, the limits are set and the response of the institution is to implement what has been mandated. We have found in our studies that, even within these set limits, the relative success of the institution's response in adaptation and change is greatly influenced by the quality and vigour of its leadership.

The literature on organisational change provided the theoretical basis of our studies on the management of universities in a period of rapid change. Weicks 17 analyses that universities act as loosely coupled systems helps to provide a framework to conceptualize the way in which subunits of higher education institutions both respond to and cope with internal and external pressures. Since open systems are subject to complex environmental pressures, we found that institutions tend to respond to

change in a self-protective manner.

Adaptation and implementation of change could meet with all sorts of resistance, especially if it is perceived as being implemented in a dictatorial manner. But change could also proceed relatively smoothly even in a contracting organisation, as can be observed from the Salford case (Chapter 13). The key to the way the process develops again seems to be the quality of leadership and its ability to generate enthusiasm and to be sensitive to the flow of power within the organisation.

PART TWO

The External Environment of University Management

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Chapter 8 The Development of Higher Education in Malta up to 1980

The Framework of the University System in Britain

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Chapter 6

The Framework of the University System in Britain

6.1 Introduction

In this chapter we will examine the framework of the University system in Britain. We will first look briefly at the development of Higher Education in Britain. We will then examine the Binary System and its implication for the Universities. In the next section we look at the role and functions of the University Grants Committee and examine how this role has been changing in recent years. Finally we will examine the structure of university government, in particular the role of Council, Senate and the Vice-chancellor, and the use of committees in universities.

6.2 The Development of Higher Education in Britain

Higher Education in Britain can be traced back to its roots in the antecedents of Oxford and Cambridge in the 12th Century, but growth was slow and by the beginning of this century the English university system was a restrictive and elitist group of institutions.

In England, Oxford and Cambridge stood at the centre,

the University of London had emerged as a federation of hetrogeneous colleges in the capital, and university charters were being granted to colleges in the major provincial cities, e.g. Nottingham, Leeds and Southampton. By the end of the nineteenth century the system as a whole had 20,000 students out of a population of forty million.

In the twentieth century there has been a more substantial growth from this tiny base. The number of students has risen from twenty-five thousand before the first world war to twice as many between the wars, and over twenty times as many at the present time, so that in 1983/84 there were 534,000 home full-time and sandwich students in higher education of which 268,000 were in universities and 266,000 in public sector higher education.

In spite of this large expansion, higher education in Britain compared with the United States and many other industrialised countries, is relatively small. In 1981, the proportion of the age group who entered higher education in Britain was 13.2 per cent. Similar figures for the United States, Japan and France are about 30 per cent, 26 per cent and 20 per cent respectively.

The two wars stimulated the growth of higher education.

They created climates of opinion favourable to reform in general and to educational expansion in particular and this

increased the effective demand for university places; also the war showed the importance of university research for military and industrial efficiency.

At the same time the demand for graduates had strengthened slowly as managerial and professional posts expanded in industry, commerce, government and in the educational system itself. During the course of the century the universities became centres of every kind of research in the sciences and in the arts.

Although the growth of the universities has been continuous throughout the century and the two world wars accelerated the trends, it is clear that social, economic and political developments since the second world war have surpassed all previous pressures towards expansion which have continued until the beginning of this decade. Until the fifties only a very small minority of radical expansionists were ready to contemplate the possibility of 10 per cent of the relevant age group in universities. By the time the Robbins Committee reported in 1963, middle class opinion, including academic opinion, had already shifted to accept the idea of educating some 20 per cent of the age group to higher education level by 1980.

Behind this shift lie fundamental changes of political

and social outlook. Aspirations to this higher standard of education are now taken for granted in the middle classes. Moreover, the older class conceptions of education had been rapidly eroded in post war years. The inequality of educational opportunity became common knowledge and the increased access to education became a criterion of distributive justice. This motif was strengthened by the idea of developing the full economic potential of the work force. The assumption of a restricted 'pool of ability' was seen as the rationale for preserving class privileges. In this process the ideological defence of an elite system of universities was seriously undermined and policy for the development of higher education has come to be seen more in terms of economic feasibility (Halsey and Trow)³.

The period of most rapid expansion in the number of universities is the period 1961-4 in which the number of universities nearly doubled from 22 to 42. Seven new universities in England - Sussex, East Anglia, York, Essex, Kent, Warwick and Lancaster, and four in Scotland, Strathclyde, Heriott Watt, Stirling and Dundee were granted charters. Within four years of the publication of the Robbins Report, nine English Colleges of Advanced Technology were given University status. These were Aston, Bath, Bradford, Brunel, Chelsea, City, Loughborough, Salford and Surrey. The ex Colleges of Advanced Technology, with their heavy concentration on engineering and applied sciences, and their

keenness to develop the sandwich type of course have in some respects a greater claim to newness than the new universities. They embodied a radical departure in the stress which they put on cooperation with local industry and the development of teaching arrangements interposed with industrial experience. On the other hand the new universities have distinguished themselves from the older foundations in their attempts to move away from the dominant single subject honours degree to wider and more flexible curricula and this has had its organisational counter part in the blurring of the lines and reductions of autonomy of disciplinary departments.

The Robbins' Report on Higher Education was published in 1963⁴. It legitimated, but did not initiate, the massive expansion in higher education. The pressures for growth were already there, the main ones being the rising teenage population and the growing proportion of pupils staying at school beyond the minimum learning age.

The late 1950's and the 1960's were a period of economic boom and confidence and many people held the view that the economy would continue to expand and that education contributed to that expansion. It is symptomatic of the spirit of the times that the Government immediately accepted the main recommendations for expansion and made funds available to the U.G.C. to meet the targets for 1971.

The Robbins Committee (1963) identified four objectives essential to the higher education system. These it described as:

"instructions in skills; promotion of the general powers of the mind; the advancement of learning; and the transmission of a common culture and a common standard of citizenship".

Underlying these objectives was the fundamental principle that:

"courses for higher education should be available to all who are qualified by ability and attainment to pursue them and who wished to do so".5

The Anderson Report in 1960⁶ had proposed that mandatory grants should be available for all full time degree level students with two or more passes at G.C.E. Advanced Level. This proposal had already been accepted by the Government. On this basis the Robbins principle came to be the main criterion determing the overall provision of resources for higher education. It was expected that the proportion of the age group entering full time higher education would increase from 8 per cent to 17 per cent between 1961 and 1981. This would result in an increase in student numbers from 216 to 560 thousand.

The recommendations of Robbins implied the continuation of a dominant university sector and the possible upgrading

of other institutions to the university sector. The university's share in higher education places was to go up from 55 per cent to 60 per cent in 1980. In order to achieve this the CATS would become universities and, in addition to the eight universities already planned by the U.G.C., six more universities were proposed while existing universities were to be expanded.

In spite of these dramatic proposals Robbins had actually underestimated the demand for higher education throughout the sixties. Robbins' forecast was that the proportion of school leavers with two or more 'A' Levels by 1971 would be 10 per cent, in fact it was nearly 14 per cent. By 1970 the DES was forecasting that by 1981, 22 per cent of school leavers would have the required 'A' Levels. However the figure remained below 14 per cent throughout the 1970's.

6.3 The Binary System

Robbins recommended that by 1980 most higher education should be in universities or in university dominated teacher training institutions. However, in 1965 just two years after the Robbins report Anthony Crossland announced the binary policy and prevented that happening. The reasons put forward for the new policy included the growing need for vocational, professional, and industrially based courses

that could not be fully met by the universities.

Anthony Crossland's Woolwich speech, made on 27th April 1965, set the seal on this policy.

"On one hand we have what has come to be called the autonomous sector, represented by the universities in whose ranks, of course, I now include the Colleges of Advanced Technology. On the other hand we have the public sector, represented by the leading technical colleges and colleges of education. The government accepts this dual system as being fundamentally the right one".

Administratively, the British binary system is less sharp than in many other countries. It corresponds to differences of ownership and control of institutions, mechanism of finance, forms of academic control and salaries and career structures of staff, but does not mark sharp academic differences.

In Britain five categories of institutions can be identified. At one extreme is the recently founded University of Buckingham, almost entirely dependent on student fees and subject to no other external control. Second are the traditional universities, usually independent corporations with Royal Charters, receiving most of their income from public funds through the U.G.C. Third is the Open University. A White Paper in February 1966 was followed by the granting of a Royal Charter in 1969. By 1980, the Open University with its 60,000 registered students

was larger than any other British institution. It receives most of its income by means of a direct grant from the Department of Education and Science and the Scottish Education Department. Fourth are other institutions receiving a direct grant from the DES or the SED. Fifth are the institutions maintained by local education authorities, which in England comprise nearly 90 per cent of non-university higher education.

With the exception of the University of Buckingham and the Open University each of these categories itself comprises a wide range of institutions. If the activities of each British higher education institution are considered, instead of two sharply divided sectors, one would find overlapping distribution of activities. The Honours degree is the central concern in all types of institution. In the universities over three quarters of the student load and in the non-university sector well over half the equivalent full time students are on full time first degree courses.

Differences in legal and administrative arrangements do not therefore correspond to sharp differences in academic functions. Similar activities can be performed in institutions with very different legal status. A simple binary policy with two sectors acting independently and competitively is unlikely to encourage diversity when there is a severe competition for students and resources. There is a strong tendency for institutions on both sides even to compete more

than previously on the middle ground of full honours degree courses, unless there are strong incentives, or pressures in the form of cuts to do otherwise. It could be argued that it is necessary to create a mechanism which will allocate functions in this network of partly specialised institutions. The strategic choice should not be a straight forward choice between rigid bureaucratic control and unrestrained market competition. Institutions should be able to respond directly to external economic and social influence through the market mechanism (Burgess)8. As we will see in our case studies, one way of achieving this is to receive a significant proportion of their income from fees and sale of services. It has been suggested that grants should be linked to performance. It is not realistic, however, to expect competition by itself to create a system of Higher Education that meets acceptable criteria of excellence, efficiency and equity. Central agencies need to have powers to coordinate the broad functions of independent institutions, but their policy should be subject to open debate and discussion.

6.4 The University Grants Committee

According to Becher and Kogan⁹ there are two antinomies implicit in the governance of British Higher Education. The first is that, whilst the freedom of the basic unit, that is the individual university, is a dominant academic norm,

the central authorities influence the higher education system so was to make its norms compatible with the needs of the society which nourishes and sanctions it. The second contradiction is that, although higher education has changed in response to the social expectations authoritatively placed by government and others upon it, it has also persistently demonstrated a contra functionalism, a different view of society and its needs, embodied in the entrenched behaviour of the academic way of life. It nurtures beliefs that the growth and transmission of knowledge are legitimate in themselves, not depending on their right to flourish on stated public demands; and that it is a proper function of academic institutions to act as centres of alternative opinions within the political system.

The main organism through which the Central Authorities influence and in more recent years direct higher education in the university sector is the University Grants Committee. Established by a Treasury Minute in 1919 it is essentially a mechanism of transferring public funds to the universities without subjecting universities to the rigours of political accountability. Its terms of reference are to inquire into the financial needs of University education in Great Britain and to advise the Government as to the application of any grants towards meeting them, to collect, examine and to make available information relating to university education throughout the United Kingdom. It is also expected to assist

in consultation with the universities and other bodies concerned, in the preparation and execution of such plans for the development of the universities as from time to time may be required in order to ensure that they are fully adequate to national needs.

There are several distinctive features of the U.G.C., according to Robert Berdahl amongst these are:

"the five year grant period, designed to reconcile flexibility with continuity; the visitation of the recipient institutions by representatives of the U.G.C.; the publication of some type of annual statement by the participating colleges; and finally the obvious government disclaimer that no institution could claim a vested right to its grant".

Other characteristics of the U.G.C.'s role are collecting and publishing information on universities, their students and their staff, the predominantly academic membership of the committee itself and the block grant.

The heart of the U.G.C./Universities realtionship was the practice of making a single block grant to each university. Usually referred to as the recurrent grant, it was intended to form part of the university's general income and to be spent at the university's discretion. On the other hand money for capital expenditure and specifically agreed projects and equipment was made available through the non recurrent grant.

The block grant was so central to the role of the U.G.C. that it is useful to see how it operated until it was abolished in 1975.

The procedures for determining the block grant were as follows, (Moodie) 11

- 1. the universities would assess their own needs in the light of their existing and proposed activities.
- 2. these were analaysed and judged by the U.G.C. aided by its permanent staff of officials and more recently by the various subject committees.
- 3. the U.G.C. advised the Government on the sums required.
- 4. after discussions between the Treasury and the U.G.C. the total was usually agreed. Then it was the U.G.C. alone that allocated this total block grant among the various competing claims upon its budget.

The crux of the system from the universities' point of view was that they initiated all proposals for grant support and once they received their grants they made the final decision about how they should be used. Reporting in 1968 the U.G.C. explained that the block grant 'principle' has long been regarded as necessary to ensure a reasonable measure of academic freedom and to avoid the management of universities by the Government or by the Committee. This principle is based upon the belief that it is essential to the universities activities and development, and secondly that financial responsibility is likely to produce the optimum deployment of university resources.

The essence of the U.G.C.'s role for a long time lay in a series of understandings and conventional restraints that evolved early in its history. The principal and fundamental understandings were that all formal proposals and decisions should emerge from a process of informal decisions between the Universities and the U.G.C. and between the U.G.C. and the Treasury and that any formal communications be interpreted in the light of these discussions. There was an assumption by each party that no major new development be embarked upon or agreed activity made financially impossible without ample notice and further discussion. There was a shared belief in the value of universities and the kind of education they gave, and in the need to respect their autonomy if they were to maintain standards.

Moodie 12 suggests that the Robbins Committee endorsement of the system may be seen as both the final seal upon and virtually the final act of 'the golden age' of the U.G.C. system. Since 1963, the behaviour of the U.G.C. and the whole relationship between government and universities have changed considerably.

Until 1964 the U.G.C. received its funds from the Treasury and since the latter is the source of funds for all Government departments, the U.G.C. share was only a minute percentage of the whole. In 1964 it was switched to the DES, and whilst the U.G.C. fund was not much

different from what it had been before, it did represent quite a substantial percentage of the DES expenditure.

By 1968 the U.G.C. was stressing its positive and active relations with the Government and with the Universities individually and collectively and that it was its duty to provide a broad strategic picture even at the risk of appearing 'dirigiste' in giving the fullest and clearest possible guidance so that the universities would make their decisions within a framework of national needs and priorities. Since that date the universities' ability to control their destinies has been further eroded. The first major change came in 1975 with the disappearance of the quinquennial grant system and its replacement by the so called rolling triennium in which only the first year's allocation is a definite committment of funds.

The greatest major change was perhaps the Treasury decision in 1980, that the total grant to universities should be 'cash led rather than numbers led' which meant that the grant would be primarily fixed by reference to the economic situation, and educational considerations would come afterwards. This led directly to the 1981 cuts of something like 15% in university income over three years, cuts involving a drop in student enrollment of nearly 18,000 and the loss of something like 7,000 academic posts over the next four years. More relevant here, however, was

the U.G.C. decision to implement the cuts differently according to its own discriminating judgement about the claims and implicit value of different universities.

Together with the reduced grant allocation there were memorandums of guidance, even more precise than on previous occasions, with respect to total science and non-science student members, particular subjects to be phased out, contracted or less commonly expanded.

This brief survey shows how the role of the U.G.C. changed over the years. There has been great criticism of the U.G.C. and the way it has acquiesced to Government policy. It was increasingly being questioned whether the U.G.C. in its present form could continue to fulfill its function effectively.

One of the main criticisms of the U.G.C. was its failure to understand properly the nature of the process of reducing the system. Prof. Ashworth of the University of Salford argues 13 that Dr. Parkes the U.G.C. Chairman and his colleagues felt that contraction would be the same as expansion and all they had to do was to change the signs in the planning equation. The social processes are profoundly and fundamentally different from mathematical formulae. During a period of expansion Prof. Ashworth suggest that the U.G.C. was absolutely right to plan policy on a subject basis, but this approach was inappropriate in a period of contraction.

Some critics 14 have stated that the U.G.C. is not equipped to scrap courses and to dismantle departments in universities, nor was it able to cope with the impact of its decisions on individual institutions. Established in a period of expansion as an honest broker between government and universities it could not suddenly become an all powerful arbitrator.

The Report of the Steering Committee for Efficiency Studies in Universities 15 published in March 1985 stated that, since its establishment, the U.G.C. has made annual grants to universities. With the end of expansion, and the government increasing emphasis on value for money, these grants have been accompanied by more and more specific advice, and it is becoming harder for universities to ignore that advice. The role of the U.G.C. has changed substantially in the last ten years though its terms of reference have remained essentially the same.

This change has, in turn, posed the universities with some problems. They now tend to see the U.G.C. as a tool of the DES, a view that it is readily reinforced when Government fails to provide the overall planning framework within which the university system is set. The Jarratt Report concluded its section on the U.G.C. (4.19) by stating that it doubts whether, as it is now constituted and staffed, the U.G.C. could carry out its new roles.

It recommended that the Government should commission an investigation into the role structure and staffing of the U.G.C. This Commission was set up in August 1985 under the chairmanship of Lord Croham.

Structure of University Government

6.5 Introduction

In terms of structure, there is considerable variety in the detailed constitutional arrangements embodied in the Charters and Statutes of individual universities. With the exception of the ancient universities of Oxford and Cambridge several broad categories with common patterns of organisation can be established. Thus the following generalisations do not apply to them and neither to a lesser extent to the University of London and to the University of Wales, which is usually considered, like London, to be a federal university with a mainly examining and degree awarding function, with nearly all its constituent colleges having themselves an internal structure quite similar to an independant university.

6.5.2 The Court

The most common pattern found is that which was developed

in the nineteenth century in the provincial cities of England such as Birmingham, Manchester and Liverpool, and usually referred to as the English civic model. The main feature of this civic model is that of government by committee. The supreme governing body at the top of this hierarchy of committees is the Court. The Court, which in all cases is a large unwieldy body, was formed originally to give an articulation of local interest in a university, but nowadays it plays no part in decision making. It is mainly composed of academic staff and graduates, nominees of other universities, local authorities, professional bodies and so on. It meets once or twice a year to examine the reports and accounts of the university. It has also the duty to elect the Chancellor, who is the ceremonial head of the university and whose function is mainly symbolic. It is frequently suggested that the Court has outlived its usefulness. The University of Birmingham - Review Body in 1973, recommended that the Court should be ceremonial only. Durham abolished its Court ten years earlier without consequent adversity.

6.5.3. The Council

In terms of formal power, the Council is usually the most important body. It has major policy making power and it is the body responsible for the finances of the university.

In consultation with the Senate it usually appoints the vice chancellor. Academic appointments have to be authorized and approved by the Council. The size of the Council varies, the average number is about thirtyfive members, with external lay members outnumbering academics by something like four to one.

The Council is the effective governing body of the university and its influence is felt in every area of its activity. In most universities it avoids involving itself in purely academic matters and, until recently, rarely if ever in conflicts with the Senate. The Council, with its financial control, has great influence over the shape of academic development. Academic staff have critizised Councils for two main reasons, its predominantly lay membership which means that important decisions are made by persons who might not have sufficient knowledge and understanding on how the university works to make the right decisions and the fact that its non-professional staff have in most cases little or nominal representation. (Livingston)¹⁶.

There are some ¹⁷who argue that like the Court the Council with its predominantly lay membership has outlived its usefulness. In the nineteenth century when local interest contributed a large proportion of a university's finance, e.g. Wills in Bristol, and when universities had mainly local orientation and drew students mainly from

surrounding districts, local representation in governing bodies made sense. Nowadays, with finance coming mainly from central government and in the national or international overall orientation of most universities, the case for local representation and control is greatly diminished.

The Jarratt Report confirmed that virtually all Councils have majority lay members. The Privy Council in approving Charters and Statutes now insists that this must be so. The Report stresses the vital role which such unpaid laymen have in universities. It suggests that local authority representation could now be reduced to make way for wider spans of skills and experience with members drawn from industry, commerce and the professions, from local, regional or national sources. The time given by lay members of Council is not only valuable but essential to the institution. It brings into the university a type of knowledge and experience which is scarce in its own ranks. Given the nature of the environment in which universities now work it is important that laymen should be recruited for their experience and skills.

"It is evident", the Report states 18 "that over the past three decades the influence of Councils in most universities has weakened".

It makes various proposals how Councils should assert their

responsibilities in governing their institutions notably in respect of strategic plans to underpin academic decisions and structures which bring planning, resource allocation and accountability together into one corporate process, linking academic, financial and physical aspects. Council agendas should be streamlined by separating policy from routine matters. This will give Council more time to debate the more important issues.

6.5.4 The Senate

Next in importance in the university's structure of government is the university's main academic body, the Senate. This is the main body responsible for teaching and the disciplining of students. Heads of departments are usually accountable to Senate for the performance of their department's teaching and research duties. Though admissions are usually delegated to the boards of faculties, schools or departments, The Senate remains responsible for this and other work which it delegates to lower levels in the organisation. The composition of the Senate traditionally includes all professors of the university, together with a limited number of representatives of the non-professorial staff as well as a few administrative members such as the registrar and the librarian. There is a fairly wide variation between

universities. The increase in numbers in recent years has made the Senate a large and perhaps unwieldy body. To facilitate its operations the bulk of its work is delegated to committees, who take the effective decisions which the whole senate usually ratifies in due course, sometimes after protracted discussion.

Where the composition of the Senate follows the traditional lines, and this is the most common practice, the
size of the Senate varies with the size of the university;
e.g. Manchester, one of the largest has a Senate of two
hundred and eighty, whilst Keele, one of the smaller, has
a Senate of sixty-four members.

In order that they may carry out their decision making function more effectively some universities have been trying to reduce the size of the Senate by ending automatic Senate membership for professors. Some civic universities such as Leeds and Liverpool have been more concerned with making their Senate more representative or democratic rather than transforming it into a more effective decision making body. As a consequence they have actually increased their Senate membership. In 1974 for example Leeds increased its Senate membership from 120 to 158, inspite of abolishing the automatic right of professors to a Senate seat.

The former colleges of advanced technology have been

more radical. In few, have professors automatic right of representation and in the overall, membership is smaller. At Aston the membership of Senate is forty. The secret of a small senate is to have professors elected either on a school or faculty basis by their fellow professors or by all staff, with a similar franchise applying to a fixed proportion of elected non professors.

The Jarratt Report 19 affirms that Senates are the main forum for generating an academic view and giving advice on broad issues to Council. They should continue to play on essential role in decisions affecting academic questions though much of this work consists of coordinating and endorsing the detailed academic work carried on their behalf in faculty boards, departments and committees.

Senates that are very large may not be the best places to undertake planning and resource allocation. It is proposed 20 that this role should fall on a central committee composed of members of both Council and Senate appointed by Council and reporting to both bodies. This is what took place at Salford in 1981 and Keele in 1984.

The decades of expansion up to 1980 have placed the Senate in ascendancy in its relationship with council. The relative decline in the exercise of its influence by Council has increased the potential for Senate to resist change and

to exercise natural conservatism. In the past a very high priority has been given to a harmonious non conflict relationship between the two bodies. It may well be, however, that in the circumstances now facing universities, especially with the increased rate with which change is taking place, a degree of tension and conflict between them is necessary, which in fact can be creative and benefical in the long term. In order that this can happen Councils must assert themselves.

6.5.5 The Faculty/School

Below the Senate there is usually interposed on organisation charts of universities, the faculties, as they are
known in the older universities, or schools as they are known
in the newer. These are usually a means of coordinating
departments whose work is closely related, or who may share
students with one another. The groupings vary from one
university to another.

6.5.6 The Department

The next unit of organisation beneath the Senate, in most places, is the department. Most departments have an appointed head, traditionally 'the professor' or holder of specific chair. When there is more than one chair in a

department, there may be some election by the professor and staff to the chairmanship, or the headship may rotate. The critical position is that of a full professor head of department. The teaching and research staff will almost invariably be responsible to him for the fulfillment of their duties.

6.5.7 The Committee System

In examining the organisation structure of a university one comes across two outstanding features. First, unlike the case of other large organisations, e.g. business organisations, the work in the university is not based upon hierarchical relationships. Not only is much work functionally divided between Council and Senate but it is to a large extent devolved from one committee to another. Secondly, there is a clear break between the non-hierarchical structure above the level of the department and the existence of hierarchy within departments. These two aspects, division of functions and committee at one level and division by hierarchy at another, have led to a variety of criticism, the most recent being found in the various study reports of the Jarratt Committee.

It is recognised that the detailed exercise of powers of Councils and Senates is usually carried out through a

large and often elaborate committee structure. A university is likely to have between 50 to 100 committees reporting to either Council or Senate. A further group of committees, mainly concerned with academic syllabus and assessment, will be found at the faculty level. Committees are used extensively for achieving consensus and as a means of spreading information and understanding. They are also used for coordinating features of broad policies. Joint committees of Council and Senate play an important role in the working relationship between the two bodies.

A number of criticisms has been levelled at the Committee system. These include the following: the large amount of time and money involved in maintaining elaborate committee systems, committee structures were making coordination more difficult, Jarratt found evidence of too much reliance on informal processes for coordination between some major committees; committee members sometimes acted as sectional representatives rather than in the interest of the university as a whole. (Jarratt 1985).

It is argued that their effectiveness could be considerably improved if their number and their inter relationship are thoroughly reviewed on a regular basis and clear terms of reference drawn up. Committees are likely to continue in existence, even when their most important functions have

passed elsewhere. The size and frequency of meetings of committees should also be subject to regular and thorough review. Universities should be more rigorous in pruning and keeping the system working tightly. In general one cycle of meetings per term should be sufficient provided that the administration exercises experience and foresight in the scheduling of business.

A distinction might be drawn between those parts of the committee system concerned with academic matters and those concerned with non academic functions. In the former, decision making by committees is both desireable and necessary for sound functional reasons. In the latter decision making might normally be assigned to individual managers or officers either without committee involvement or aided by consultative committees. There should be a significant increase in the delegation of authority to chairman and officials in routine matters. Time of committee members is an expensive commodity and should not be wasted on routine items.

It is clear that the committee system will continue to form the core of the organisational framework of the university. In an era of dwindling resources this sytem has to be operated in the most efficient way. As we shall see in our case studies, one of the first steps to be taken in the restructuring of these universities to meet the demands made upon them and to become more responsive to outside

pressures was the restructuring of the committee system.

In the case of Keele the committee system has been completely rationalised. So that formal structure would be kept at a minumum, the university should become more efficient in its response to outside pressures and at the same time individuals will spend less time on unproductive committees and thus have more time for teaching and research. There is little doubt that if a university wants to achieve these objectives it will need to streamline and control its committee structure.

6.5.8 The Vice-Chancellor

At the head of the administrative system is the Vice-Chancellor (V-C). He is the principal academic and executive officer and is responsible for maintaining and promoting the efficiency and good order of the University. A wide range of management styles and modes of operating characterizes the V-Cs of our case studies. This variety of leadership style is also found in the six universities studied by the Jarratt Committee.

In some cases the V-C sees his role quite clearly as providing leadership and exercising executive authority (Aston); in others he sees his role primarily as the chairman seeking consensus (Bath). Different personalities will always

lead to different styles, but the tradition that the V-C's are scholars first, and acting as chairman carrying out the will of senate, rather than leading is changing. The shift to the style of chief executive bearing the responsibility for leadership and effective management of the institution is emerging and is likely to be all the more necessary for the future. All our case studies illustrate this shift.

The V-Cs have virtually no formal constitutional power (Jarratt 1985) other than those which may be delegated to them to act on behalf of Council, Senate or a Committee. In the type of problems facing V-Cs today this lack of formal authority may make their job more arduous and difficult to perform. This could be illustrated by the description of the situation in which the V-C of Aston found himself in July 1982 as per Kogan and Kogan 1983²¹.

"In defending his university before the select committee, the V-C affirmed support for the whole range of activities in his university. Yet he found himself sending numerous letters to heads of departments, persuading them or coercing them to fall in line with the government's wishes. The problems he faced were considerable: he was threatened with legal action; many of his senior colleagues would not support the policy which he felt bound to administer to avoid a deficit; and he lacked the political support of the Council and the Senate to take the steps needed to achieve the projected reductions. This is a striking example of a V-C being forced out of his collegial role and into a position of any manager in an enterprise facing recession and sudden contraction".

For an institution to survive and to seize the

opportunities opened to it in the future, the V-C will have to adopt a clear role as the executive leader and it is within the powers of the Council to give him formally the necessary authority to carry it out.

The V-C should certainly know something about how a complex organisation handles the process of managing change. Increasingly too, as universities are developing their involvement with industry and increasing their efforts to raise funds from non public sources, he must have some knowledge of finance and business. In this area the help and advice of lay officers of the Council members plays an increasingly important role.

The increasingly important role of the V-C cannot be over emphasized and we shall be able to assess this in our case studies. Yet the quality of academic leadership is certain to be an issue of greatest importance in the 1990's at every level institution, faculty or department. It has already become so in the United States, but in Britain there has been a reluctance to emphasize leadership at the expense of collegiality. Yet the two are not necessarily in conflict. It is probably that only be imaginative leadership that British higher education can maintain its independence. The V-C may be at the peak of the pyramid, but issues of leadership cannot be confined to 'top management'; they apply throughout institutions. Maybe particular attention should

be paid to the choice of pro V-Cs and the rest of the second tier of management. Though such appointments rarely generate the same excitement as those of V-Cs, yet the day to day management of institutions is in their hands, and they are people from among whom the top leaders of the 1990's will be chosen.

6.5.9 The Administration

Running parallel with the governing arrangements described above, there is an administration run by full time administrative staff. All their work is ultimately the responsibility of Council, Senate, or a Committee of one of these bodies. The senior administrator in a university is normally the Registrar. The range of tasks undertaken by central administration is impressive. They include servicing of the governing bodies and committee sytem; academic administration; financial administration; personnel work; and the maintenance of university property. The tasks are complex because of the wide range of academic disciplines, the complexity of plant and equipment and the employment of hundreds of 'professional' staff. Moreover, the senior administrative officers make an important contribution to policy formation especially in the informal processes.

Administrators have an important role in providing

support for all the university's principal activities. Over the past decade the nature of their role has changed somewhat and senior administrators often now have an increasingly important task in supporting the V-C. At the University of Bath, the Planning Officer reports directly to the V-C, so does the Planning Officer at Aston. It is in the interest of universities to develop the skills and potential of their administrative staff.

An efficient administrative system has always been adjunct to a university's organisational framework. In today's increasingly changing conditions and diminishing resources it is a necessity.

The Policy of Change 1979-85

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Chapter 7

The Policy of Change 1979-85

7.1 Introduction

This study is concerned with the management of universities in a period of rapid change. In order to understand better the reasons for and the implications of the various management strategies it is essential for one to be familiar with the external environment in which these institutions operate and the various external factors and constraints which impinge upon and influence their behaviour.

In this chapter we shall be looking at the U.K. Governments policy on universities especially since the late seventies. We have already noted the expansion which took place since the end of the Second World War, reaching its peak in the sixties with the Robbins Report and the doubling in the number of universities, and such expansion continuing right up until the early eighties. Table 7.1 shows the number of Home full time and sandwich students in the United Kingdom Universities, analysed by level of study.

As we examine the more important policy decisions taken during this period one can describe it as a policy of change.

TABLE 7.1

United Kingdom - Universities

Home Full Time and Sandwich Students

Analysed By Level Of Study

(000s)

	1979/80	1980/81	1981/82	1982/83	1983/84
Post Graduates	. 31	32	32	30	31
1st Degree	232	240	243	241	235
Other Advanced	2	2	2	2	2
<u>Total</u>	265	274	277	273	268

Source: The Development of Higher Education into the 1990's Cmnd 9524 London: HMSO P43.

For more than ten years university planning has been disrupted and the morale at universities battered by unpredictable cuts. Improvisation punctuated by increasingly brief periods of normality has become established as the pattern of university development. Soon with the cumulative effect of an annual 2 per cent cut stretching into the future, there will be little pause for breath.

In the mid 1970's the old quinquennium grant with its assurance of secure and growing university income was abolished. After two years of improvisation a precarious recovery took place with the introduction of triennial grants. That recovery was in turn disrupted when the Government introduced a policy of 'full costs' fees for overseas students in 1979, which although not as harmful as at first predicted cost the universities millions of pounds.

A year later in the winter of 1980 even the mirage of level funding disappeared when the Thatcher Government ordered its first real assualt on public expenditure. The following summer the U.G.C. was left with the unpalatable task of sharing out the resulting 15 per cent cuts which were the universities' involuntary contribution to the national endeavour. The next two and a half years were occupied in restoring an illusion of normal business. The new blood programme, the restructing fund, the I.T. initiative,

even the U.G.C., all contributed to this precarious recovery of morale.

In his address of welcome to the participants of the Sixth International Conference on Higher Education at the University of Lancaster in August 1984, Dr Gareth Williams stated that the trauma and upheavals of the previous years were now a thing of the past, and a leaner but fitter university system had emerged which could look to the future with greater optimism and higher morale.

As we shall see there is to be no respite; the realistic level funding which the U.G.C. has so strongly demanded in its strategy advice to the Government seems not to be a feasible outcome. The Green Paper published in May 1985 was supposed to set the scene for the development of higher education into the 1990's, but long before its publication the universities were told to prepare for a 2 per cent cut a year stretching away into the 1990's. The selective Research Funds grants policy contemplated by the U.G.C. has further increased tension and undermined morale.

Again in the summer of 1985 the paraphenalia of crisis were being wheeled out at Kent and East Anglia, at Stirling and St. Andrews, Brunel, Sheffield and many others.

It is not only in the United Kingdom that higher

education has been under pressure. The economic recession has led governments in nearly all non communist industrialised countries to look for savings in public expenditure wherever they could find them. In some cases higher education suffered a roughly proportionate share in any cut backs; in others special considerations such as demographic change affected the outcome. Faced with the continuing prospect of resources constraints, governments need stronger guides to policy. In particular they need to take into account that public attitudes towards higher education have been changing in recent years.

In the 1982 O.E.C.D. Higher Education Development Seminar at Hatfield Polytechnic² a DES note to participants stated that:

"it is at a time when Government is moving away from providing higher education on the basis of student demand towards a policy of relating provision to the volume of expenditure that it is able and ready to sustain, that new questions arise as to how the amount and mix of provisions should be determined. Public attitudes can help to answer these questions".

In October 1980 the DES commissioned a major research projection on 'Expectations of Higher Education' from Brunel University. In its brief the DES spelled out the British Government's view in more detail.

"It has often been said that the higher education system should seek to meet 'the country's needs'. In this context the country's needs are often equaled with the 'country's economic needs' and even the employers needs for highly qualified manpower. Certainly it seems likely that employers attitudes towards and expectations of the education system as a whole are going to be increasingly influential and this makes it essential that those in higher education both students and providers should be as clear as possible in their perceptions and expectations. Similarily it is important to weigh these external expectations alongside those of the student and providers themselves. It is the Departments'belief that a better understanding of the expectations which society and different elements of society hold of higher education will allow these to be more precisely articulated than hitherto and thus promote a more informed debate on what as a nation, we can legitimately expect of higher education and how these expectations might be best fulfilled". 3

7.2 The U.G.C. 1981 Cuts

Thus higher education was not only under the pressure of limited resources but in the United Kingdom it was coming under new scrutiny in which the government would require much greater explicitness about the bargain between higher education and society at large. As we shall see when we examine The University of Malta case study that the Maltese Government in 1978 stated that it was not only its responsibility to determine the amount of public funds which the country can afford to devote to higher education but to indicate the priorities of the nation and of ensuring that the country's limited resources are utilized for the maximum

benefit of the whole nation and that planning would ensure that there would be some acceptable relationship between the number of professional personnel needed and that coming out of the university.

In spite of the promises of informed debate suggested in the above DES brief, the government in December 1980 abandoned its level funding and announced the reduction in funds for home students. The Government policy was promulgated in the Expenditure White Paper in March 1981. Taken together with the policies on overseas student fees the cuts produced a total cut in resources for universities in real terms between 1980/81 and 1983/84 of about 13 per cent.

The U.G.C. considered the various options opened to it: whether it would reduce the number of universities; establish a tier system with the top tier liberally funded and staffed for substantial research, and the remainder financed as teaching institutions; or a policy of equal misery for all by spreading the cuts equally between the various universities.

In the end all these options were rejected in favour of a selective distribution of student places within each subject group throughout the country. This decision brought to an end the myth that U.K. universities were autonomous institutions able to determine how to spend money given

to them by government.

On a 1981-82 price base the recurrent grants made to universities (that is the grant for general expenditure) were to decline from £879.62 million in 1981-82 to £808.07 million in 1983-84. Since this was a cut of 8.1 per cent in real terms, added to the cuts already made, it represented a total cut of 13 per cent since 1979.

Between 1973/74 and 1979/80 there had already been a 10 per cent fall in university income. In its defence of 'excellence' the U.G.C. argued that a further 10 per cent cut in the unit of resource was the maximum that could be tolerated without attacking the research capability of universities. So the U.G.C. package of cuts would contain a reduction in student numbers of about 5 per cent and a 10 per cent cut in resource levels for each student.

The cuts in the size of grants was so enormous that whichever policy was adopted the universities as a whole would be forced to reduce their staff by some 15 per cent. What had to be decided was: who was to suffer most - was it research or student recruitment? As the Committee favoured research, student recruitment suffered. The academics who made this decision demonstrated their belief in sustaining certain levels of quality rather than in maintaining wider entry opportunities and In fact, many of the students who were left out did find places in poly-

technics and other institutes of higher education. It is likely that they did so at the expense of their less qualified contemporaries, who could then fall out of the higher education system altogether.

The letter sent to the universities by the U.G.C. on 1st July 1981 (Circular 10/81) was very different from previous letters. For the first time in its history it was telling every university in the country that it must 'substantially' or 'significantly' reduce numbers in specific subject areas. No university escaped unscathed. The most severe cuts were made to some of the technological universities. Bath and Loughborough were protected, but most of them faced income losses of 15-20 per cent. Aston had to face a loss of income of 18 per cent over three years, Bradford suffered a 19.1 per cent cut and Salford a 27.5 per cent. These cuts were on top of the cuts already made. Keele, because of its arts and social science bias also lost a large proportion of its income. Aston was to lose more than 1000 student places, Bradford 830, Keele 460 and Salford, the hardest hit of them all, 1100. By contrast, York was to have stable numbers and Bath a slight increase. Table 7.2, shows the overall result of the Changes in U.G.C. Funding 1980-81 to 1983-84.

The U.G.C. never specified which criteria were used to determine the courses and institutions to cut. In fact

WHERE WE WERE - AN EXTRACT FROM HANSARD, DECEMBER 1985 CHANGES IN UGC FUNDING 1980-81 to 1983-84#

University	%(Real	Terms)	University	%(Real Terms)
York *Bath			*Strathclyde Exeter	-14.8 -15.1
Durham Leicester Glasgow *Loughborough East Anglia Cambridge Edinburgh Newcastle Oxford *Heriot-Watt Southampton Sheffield Nottingham Warwick Lancaster Cardiff UC Reading Bristol		-8.0 -8.2 -8.6 -9.5 -9.6 -10.3 -11.8 -12.1 -12.3	Dundee *UWIST Swansea UC Aberystwyth UC *Brunel St Andrews Hull Sussex Aberdeen *City Kent Essex Stirling *Surrey	-15.2 -15.3 -16.1 -16.6 -16.6 -16.9 -17.0 -18.8 -19.8 -19.8 -21.4 -21.8 -29.2 -31.0
Leeds Bangor UC		-13.4 -13.8	*Bradford Keele	-31.2 -32.1
London		-13.9	*Salford	-42.3
Birmingham		-14.4		

#Changes exclude compensation for early retirement and redundancy, compensation for changes in home student fees, changes to take account of minor capital works from the recurrent grant, changes in the level of local authority rates, additions made for the "new blood" and IT programmes.

Source: Aston Fortnight, January 1986.

^{*}Technological University

there is no clear pattern in the treatment meted out. A mixed group of universities received some degree of protection, those treated worse, with the exception of Keele, were technological universities; Salford, Aston and Bradford. A number of reasons have been advanced and it has been suggested that the work in the reduced departments was academically poor. But the U.G.C. has never clarified this point and others have attributed the decisions to particular biases among the U.G.C. assessors.

The best explanation to date of the criteria used by the U.G.C. in distributing its cuts was made by Sir Edward Parkes (the Chairman of the U.G.C. during the cuts) in a letter to the Times on 4th September 1985⁴.

"The technology sub committee was insistent that money available must be used to support those departments at the forefront of modern engineering and that it should be augmented by taking money away from the moribund and out of date departments. The result was that the leading technological universities (Loughborough, Bath) and the universities in the forefront of modern electronics (Edinburgh, Southampton and others) gained, and those which had too many departments which had failed to keep up with modern technology, lost".

The criterion of excellence adopted by the U.G.C. and applied in its narrowest form conflicts with the concepts of value addedness. A university may start with students with relatively poor 'A' Levels and advance them considerably. Universities such as Salford and Aston have, in the past, taken poorly qualified students and helped them to become

graduates who do well on various indices of performance including employability. In the 1985 Cantor Lecture to the Royal Society of Arts, Professor John M. Ashworth of the University of Salford, mentions the case of a Salford graduate, Martin Paynter who is a founder member and manager of Arden Dies one of the most innovative and successful die making businesses in the U.K. By any standard Martin Paynter is one of the country's most capable and successful engineers, but as he only got a 'B' and Two 'E' grades at his 'A' Level, he would not be admitted to Salford today as he would not meet the defacto entrance requirements.

In spite of the upheavals caused in some universities by the U.G.C. 1981 cuts, by 1983 the university system as a whole seemed to have returned to some form of normalcy. By the end of that year most universities had solved the immediate problems created by the cuts and managed to get back to balanced budgets. This was achieved at a price. Part of it were the thousands of qualified candidates who were turned away from the universities. Even more serious was the decimation, (in too many cases, elimination) of research and teaching fellowships which were normally the first steps in an academic career. In many cases too the older academics who accepted voluntary redundancy were far from the 'dead wood' they were supposed to be. When the special redundancy arrangements ended in September 1984, the DES had spent £238 million which enabled the universities

to keep within their recurrent grant levels, but the Government strategy had resulted in serious imbalances of subject areas and age groups.

The actual reductions of academic and related staff totalled 4,400 - 47 per cent higher than estimated - while non academic staff had been cut by 2,800 - 30 per cent lower than estimated.

"The absence of any overall plan for staff reductions in different subjects meant that in the final analyses the U.G.C. was not in a position to exercise direct and effective control over the exercise. The U.G.C.'s actions were effectively constrained by the financial and timescale requirements, the tenure rights of many academic staff and the autonomy of universities"

The Comptroller and Auditor General Report 7 continues:

"Amongst the effects to emerge were a sharp deterioration in staff: student ratios as universities shed posts faster than they reduced student numbers, and a greater than average reduction in posts in engineering technology, mathematics and computer sciences, which it had been the intention to protect. The exercise was intended to ensure that actual staff reductions sufficiently favoured the academic departments it was the aim to protect and encourage, and bite upon those it was intended to cut back... in the event the existing serious age imbalance in university staffing, and some problems in individual faculties, had been exacerbated".

To stem this tide of compounded difficulties a number of initiatives or responses were made. In December 1982 Sir Keith Joseph announced that he was making additional provision beginning in 1983/84 for training and research

in the fields relating to information technology. The Science and Engineering Research Council would administer 600 university and 400 polytechnic postgraduate courses and research training places. The U.G.C. would receive a grant for an extra 70 university posts and the SERC would be given money for 45 research fellowships. In 1985/86 2000 extra student places and 400 additional staff in universities and polytechnics would be allowed.

A further initiative was directed to maintain the flow of 'new blood' in terms of university staff. The U.G.C. received a further \$4m recurrent grant in 1983/84 to recruit 230 additional posts of which 200 would be in science and technology and the rest in arts and social sciences. A similar level of recruitment was to be provided in the following two years. The 'new blood' and other initiative helped to lift morale in the universities.

7.3 The 'Great Debate' 1984

We have seen that 1984 was a year of slow consolidation and the continuing restoration of normality, but most of all it was the year of the 'Great Debate' about the future of higher education. For many, it was the year when the storm of the 1981 cuts finally began to abate and higher education was granted some constricted breathing space.

The U.G.C. had sent out hundreds of questionnaires to various personalities, bodies and institutions involved with higher education, before submitting its advice and proposals to the government. There were 658 respondents to the questionnaire on strategy debate. In its recommendations to the Government, partly made jointly with National Advisory Board, it made a strong plea for additional resources in a number of crucial areas, including staffing, equipment grant, continuing education and research. In 1981 the Committee saw its primary task as that of bringing about changes within the universities. The Committee reminded the Government of its responsibility, in particular its promises of level funding and stability of planning.

In July 1981, the Committee's aim was to minimize the damage to the system caused by the cuts imposed by the Government. But those cuts were so severe that great harm is still being done. Academic planning has been disrupted, morale has been impaired, thousands of young people have been denied a university education, confidence in Government has been shaken and it will be difficult to restore. In its advice to the Government the U.G.C. concluded:

[&]quot;To secure full effectiveness and flexibility, further restructuring is necessary. New courses must be established research must be strengthened, unsuitable and redundant buildings must be sold or demolished, full advances must be taken of advances in technology to increase the effectiveness of teaching, staffing problems must be overcome, organization must be

improved. It is for these purposes, not to maintain the present position, still less to restore the past that in this advice we have pressed for adequate resources and an adequate planning horizon. Without them the prospect is of further disruption and decline".

7.4 The Jarratt Report

The government response was to be published in January 1985, but it was delayed until May. In the meantime eleven months after its appointment by the Committee of Vice Chancellors and Principals (CVCP) the committee chaired by Sir Alex Jarratt completed and published its report on efficiency in universities.

The findings and recommendations of the Jarratt Committee could be classified under four headings to the Universities, the U.G.C., the U.G.C. and C.V.C.P. jointly, and finally to the Government.

The Jarratt Committee found that the universities have the greatest opportunity to improve their efficiency and effectiveness in their planning and use of resources. Seven specific areas of planning were studied in which universities could make some improvements:

Strategic and long term planning. The Committee found that long term planning was largely ignored although enough was known about demography and changing patterns of employment to produce such plans.

There was little consideration of options or of means to arrive at objectives, while pressures to preserve cohesion and morale led to a reluctance to set priorities and to discuss openly academic strengths and weaknesses.

The criteria on which resources are allocated. There was little relation between universities 'long term objective' and the allocation of resources. Incremental allocation from a historical base emerged as the dominant approach,' particularly in questions of equipment and space.

In most cases, resource allocation did not appear to take into explicit account the relative strength of departments. A major omission overall was the lack of systematic use of performance indicators.

Mechanisms by which resources are allocated. The most obvious feature of most universities was the fragmentation of the allocation process, with resource frequently being considered in 'packages' of, for example, equipment grants, research support funds, etc.

Committees involved in coordination were often inadequately coordinated. Expensive equipment was sometimes
acquired without taking into account the building work
necessary to install it.

The quality and extent of management information.

Plenty of information was collected. That relating to student and staff being of good quality, but much of it was 'raw' data which was not effectively analaysed, brought together and presented. The use of departmental profiles, which include a mixture of facts and performance indicators was recommended. A great deal of work was needed to be done on various measures of university output, such as number and quality of graduates, employability of graduates, quality and value of research, publication and so on.

The financial information which was provided for departmental management varied in quality, often arriving too late to be of any practical use, and not showing forward commitments which are especially important for large science departments.

Responsibility of the allocation process. Frequently too many committees were involved in the allocation process. Some planning committees were too large because they were set up to represent sectional interests.

There was a general recognition of the need to combine in one body the responsibility of planning, resource allocation and accountability, for example, a small joint senate council body which could integrate financial and academic policies.

The budgetary control mechanism. In most cases, academic departments were the main budgetary unit, with their heads being seen as the responsible officers, although their accountabilities were not always clearly defined. An extension of the practice of charging departments for services was fully supported in the report.

The Process of Accountability. There was little formal accountability for the use of resources with allocations rarely being examined retrospectively by the allocating authorities. There was heavy reliance on informal feedback mechanisms.

The Jarratt Committee conceded that university planning was a different process not least when considering universities own constraints on change, such as the attitude to tenure, the conviction that detailed planning stifled creativity and that planning and consensus manangement appeared to be inimical. Some academics, according to the report, saw their academic discipline as more important than the long term well being of the university which housed them.

The report recommended the formation of a planning and resources committee of strictly limited size, reporting to Council and Senate. It also recommended that all universities examine their structures and develop plans within the next twelve months to meet these requirements.

It is interesting to note that most of the recommendations made to the Universities by the Jarratt Committee have been implemented at the University of Bath since the mid seventies; whilst at the University of Aston and the University of Salford many were introduced after the 1981 U.G.C. Cuts. On the other hand, at the university of Keele, it is only recently that major changes have started to take place. It is one of the objectives of this study to find out why, in institutions of roughly the same size and background, there should be such time lags in introducing reforms and innovations.

To the Government the committee's main advice was that it should provide broad policy guidelines within which the U.G.C. and universities can undertake strategic and long term planning; it should also consider what action it can take to restore a longer funding horizon for universities and it should avoid thrusting crises on universities by sudden short term changes of course. The government should be prepared to provide funds to meet the whole or greaterpart of the realistic cost of future staffing reductions agreed between individual universities and the U.G.C.

To the U.G.C. the Committee recommended that it should provide and make known its views about the prospects and direction of higher education. There should be an increase in the frequency and scope of informal and confidential discussions between individual vice chancellors and the

U.G.C. chairman and sub-committee chairman. The U.G.C. should encourage further institutional collaboration. Finally, within twelve months the U.G.C. should agree with each university a programme for implementing the recommendations in this report and should take progress into account when allocating grants.

As far as the C.V.C.P. the main recommendations were that it should encourage and assist universities in adopting best practices as those outlined in the report, and to consider whether it can extend its role in training in developing the management skills of vice-chancellors, pro vice chancellors, deans and heads of departments.

Finally the committee recommended the U.G.C. and C.V.C.P. jointly to strengthen the relationship between their secretariats. A range of performance indicators should be developed, covering both inputs and outputs and designed for use both within individual universities and for making comparisons between institutions. The University Statistical Record should be enabled to give increased access within the university system to the data it holds.

A certain amount of criticism has been levelled against the Jarratt Report. Criticism has also been made of the composition of the committee, not least by the C.V.C.P. In a meeting with Sir Keith Joseph soon after the publication of the Report, the C.V.C.P. told him that though the Report contained some useful guidiance on streamlining management within universities, much of the report did not pay enough attention to the unique difficulties of university administration. Moreover, the management consultants involved in the exercise were so unfamiliar with university management that they exaggerated the complexities of administration which they did not fully understand or appreciate. Jarratt was also wrong in despising consensus; in universities it was not a bad managerial structure. The idea that a vice chancellor should be like the president of a company was also criticised. He has to realise that there are better brains than his in the infrastructure below.

The most serious criticism that could be made about the management consultants reports is that perhaps when examining and analayzing the universities committee structure they forgot to ask themselves whether these arrangements had sprung up precisely because universities were not businesses. Universities of course have significant financial responsibilities and must manage people and money properly and show they are accountable. Their prime function, however is to provide an atmosphere of freedom of enquiry and innovation in which research study and teaching can thrive.

Involving as many people as possible in the decisions that effect them has been a part of that process and one of the distinctive elements in a unversity as opposed to a commercial business enterprise. A university cannot be run

without consensus and cooperation. It may have an efficient management structure, and a financial control system which is able to cost and account for every item of expenditure,

"but if in the process of gaining this managerial world the soul of the institution is lost, then the whole exercise would have been in vain". 10

Our studies will show that it is neither necessary nor true for a university to lose its soul and identity if it streamlines its committee structure and improves the decision making process. Of course, if the changes are being imposed through outside pressures and the time through which these innovations have to take place is limited, then the problems of resistance to change and of adjusting to new conditions will be far greater, but eventually a fitter and healthier organization may emerge. In our case studies we hope to establish some of the conditions and factors which are likely to help in this adjustment process.

The great expansion of universities in the 1960's and 70's turned them into large and complex bureaucracies which had to be managed with professional sophistication. These huge institutions with thousands of students, complex capital developments, and increasingly delicate and difficult tasks of resource allocation could no longer be run on the quiet collegial pattern that was sufficient when universities needs were much simpler and students were numbered in hundreds.

Perhaps the most important aspect of the Jarratt Report may be its retrospective quality, its capacity to convince university that the world has changed and will not turn back.

Universities have beengiven twelve months by the U.G.C. to start introducing the wide ranging reforms urged by Jarratt. These reforms have to be implemented within a specified time agreed with the U.G.C., and part of the U.G.C. grant could be witheld if the implementation process does not proceed as planned. It is a pity that the same sort of urgency and the same type of pressure could not also be exerted on the government, so that it would also implement the recommendations made to it by Jarratt, especially the restoration of long term funding so that proper university strategic planning can take place and bring to an end the sudden short term changes of course thrusting the universities into crises.

7.5 'The Development of Higher Education into the 1990's'.

The Green Paper 'The Development of Higher Education into the 1990's 1 was finally published in May 1985. The closure or amalgamation of whole universities during the next decade is forseen. This is partly due to the substantial fall in student numbers as expected from 1990's. The government commits itself to providing enough money to meet

student demand in the short term based on a 'low' projection.

The paper says little on the long term funding of higher education.

The Green Paper expresses the Governments disappointment at the country's economic performance and because Britain's competitors are producing more qualified scientists, engineers, technicians and technologists. It seems to imply that Higher Education is at least partly responsible for this state of affairs.

Higher Education it is argued should be sufficiently flexible to respond to new needs as they arise otherwise the shortage of qualified manpower will deteriorate. It should beware of anti business snobbery and should seize opportunities to enourage the entrepreneurial spirit.

Research funding should be concentrated for the sake of quality and economy. It was not necessary for all academic staff to engage in research provided they kept abreast of their subject with scholarship. Two types of universities are envisaged; those with research funding from the U.G.C.; and those, either whole universities or individual departments, which will lose such funding.

The Green Paper also seeks a value for money redefinition of the 'Robbins principle' on which higher education in Britain has been based since 1963.

Robbins said that courses for higher education should be available for all those who are qualified by ability and attainment to pursue them and who wish to do so. This meant in effect, that if you had two 'A' Levels you should have a place.

In September 1984, this was reformed by the U.G.C. and the National Advisory Board to read 'Courses in higher education should be available to all those who can benefit for them and wish to do so'. This definition is accepted by the Government, but with the major caveat - so long as tax payers substantially finance higher education - the benefit has to be sufficient to justify the cost.

Six dominant factors are identified as influencing future Government policy on higher education.

- 1. Student demand as affected by the number of qualified school leavers and mature students, the level of student support and the availability and attractiveness of alternatives to higher education.
- 2. The need for qualified manpower and the case for a continued switch into science and technology.
- 3. The need to stimulate in career training, professional updating and other forms of continuing education.
- 4. The need to provide adequately for research and to ensure effective deployment of the available resources.
- 5. The scope for increased economy and efficiency in and between institutions, including further rationalisation of provision and consideration of the optimum distribution between sectors.

6. Finally, the outcome of the review of student support, and especially the extent to which students, their families and other sponsors might progressively assume greater responsibility for their participation in higher education.

The reaction to the Green Paper was mostly hostile especially as it completely ignored the U.G.C. and Jarratt Committee recommendations on long term funding and staffing. The most substantial flaw being its failure to articulate any positive model for higher education into the 1990's. The elements are there, continuing education, closer involvement with industry, joint appointments, etc. All that the DES seems to have done is to dress up old models, with no new ideas or originality.

According to Sir Edward Parkes 12 V-C of the University of Leeds:

"the saddest aspect of the Green Paper is its failure to recognize that many of the Government's wishes are also the wishes of the majority of those in higher education. Most people in higher education also wish for greater vitality and flexibility, wish to improve quality and produce more able scientists and engineers but instead of admonitions and recriminations what higher education needs is some realistic forward planning".

Soon after the publication of the Green Paper the U.G.C. sent out its circular 12/85 to the Universities in which the Committee outlined its strategic planning framework for the late 1980's, how it proposes to review the future

distribution of resources and what information it needs to formulate the selective research policy. As the government has not accepted the case for true level funding, each university must plan for an annual decline in recurrent grant of 2 per cent in real terms. This would be the equivalent of a university the size of Southampton, about 5000/6000 students, closing down each year.

Universities have been asked to give an account of their research strengths in a new 37 subject classification citing five examples of published work in each subject.

The U.G.C. has no preconceptions about particular research areas to be encouraged, neither will it transfer resources between arts, science and medicine, although institutions may wish to do so themselves.

Under this selective research funding policy universities which do badly face a further 1.5 per cent grant loss in the first year with a likely greater rate of loss in subsequent years. This would result in some universities losing around 13.5 per cent of their grant over four years.

It is expected that there will be increasing differences among universities in the range of subjects they cover, in the nature of research they do, and in teaching styles.

With the prospect of continuing financial stringency all

universities will be faced with hard choices. Thus, as the government has refused to accept the U.G.C.'s request for truly level funding, universities must plan for an annual 2 per cent cut in real terms.

There is no safe horizon in the distance, rather the reverse, a funding policy that seems to be getting increasingly selective, a refusal by the Government to provide for long term funding, as recommended by the Jarratt Committee, and there is the imposition of a system of cash limits which is totally exposed to inflation. U.G.C. assumptions on inflation for the planning exercise are already 2 per cent below actual inflation.

Taking into consideration the grim financial outlook presented by the U.G.C., vice chancellors up and down the country have warned about further job losses and the running down of departments. The universities are expected to face substantial changes in the coming years, prompted by the switch to science and technology, research selectivity, the increase emphasis on effeciency and the general cuts in government funding.

Gloomy forecasts and warnings of job losses are coming out from different institutions regularly. At Kent 13 the V-C Dr David Ingram said:

"It is clear that we will have to lose a large number of academic and other posts over the next few years to balance our budgets".

At the University of East Anglia¹⁴ the V-C Professor Michael Thompson, told the University Court that they were facing a very sombre outlook which could only be improved by change in public attitude and Government policy. Since the 1981 Cuts inefficiency and waste have been reduced to such an extent that further economies will be difficult to make.

At Newcastle¹⁵ University the V-C Professor Lawrence Martin also warned the Court of an absolute decline in resources and continual uncertainty about the future. At Brunel¹⁶ University the V-C Professor Richard Bishop stated that:

"if we go on as at present the very best we can hope for is still a miserable outcome - adebilitated and depressed university in 1990, awaiting the next onslaught with apprehension!"

He predicted:

"at worst, bankruptcy and, at best, a total loss of the pride and the fun of scholarship, in teaching and research".

The list of doom and dire predictions is endless.

The U.G.C. has demanded level funding for universities and an end to the downward spiral of annual 2 per cent cuts in university grant. Since the winter's review of public expenditure offers no reassurance, it has been suggested in

a THES (26.7.85) editorial that the U.G.C. is likely to write to Sir Keith Joseph asking him to decide within six months which universities should close. Such action would preempt the conclusions of the U.G.C. present planning exercise, in which the universities had until November 1985 to submit their proposals on research priorities, future student numbers and financial forecasts.

The U.G.C. has made it clear that the closure of any university is a political decision beyond its legitimate capacity. It will not itself propose a list of doomed universities, but it will tell the Secretary of State which universities and departments must be protected in the cause of excellence. Members of the Committee believe that it is urgent that successful universities must be protected, in the cause of excellence, against the continuous erosion of their income, the crisis point at which the closure of universities becomes inevitable is now very close.

Thus before its selectivity initiative is properly launched and it sets about the distribution of the diminishing university grant, it might push the government on the issue of closures, since it wants to know among how many institutions the grant is to be distributed. The alternative would be further job losses in the coming years to cope with the climate of turbulence and crises in which the universities have been thrust since the late seventies, with no sign of reprieve for many years to come.

Early in 1986, in a pamphlet 'The future of Universities' 17 the CVCP published their criticism of the Green Paper. The vice chancellor's 'alternative' green paper accuses the Government of taking a

"blinkered view and failing to address itself adequately to the scale of the problem which we face. There has, unfortunately, not yet been any clear recognition of the growing incompatibility between the concept of autonomous universities (with competition between them overseen by the U.G.C.) and increase in ministerial and departmental intervention often at a level of detail".

The Vice Chancellors say that:

"British Universities accept that they are likely to have to manage on less money than their competitors, but there is a limit beyond which quality will be sacrificed and the system will lose its ability to adopt to readily changing circumstances. If that happens future generations will be less served by universities than hitherto. The Government should now accept the obligation to keep such a national asset in good order"18.

Now that we have examined the external environment in which the universities have been operating in the past decade and in particular the more important events since 1981 U.G.C. Cuts, we will look at the four U.K. Universities of our study, namely, The University of Bath which was one of the least affected by the Cuts, and the Universities of Aston, Keele and Salford, which were among the top four institutions, the other being Bradford, which were hardest

hit by the cuts. All four have been established since the war, and all except Keele are Technological universities.

The object of these studies is to analyse, review, and compare the management strategy adopted by the different universities in response to the externally imposed rapid changes; to understand the reasons behind the different strategies; to try and evaluate the success of the various strategies on a number of performance indicators; and to come to some conclusions and explore the range of management strategies and their various consequences in a context of rapid change.

7.6 Postcript - June 1986

On Tuesday 20th May 1986, the U.G.C. sent a letter 19 to the universities announcing the distribution of the following year recurrent grant and offering them guidance on planning for the late 1980's. According to this letter universities have suffered an effective cut of 5 per cent in the present financial year. In each of the next three years their current grant will be reduced by more than 2 per cent in real terms.

In a statement²⁰ in the House of Commons on the same day the then Secretary of State for Education and Science, Sir Keith Joseph stated that the government was ready to consider some further financial provision in the following years.

But he added that the Government's willingness to find the extra money would depend crucially on evidence of real progress, particularly in the further development of the policy of selectivety, the rationalization and where appropriate the closure of departments, better financial management and improved standard of teaching.

According to U.G.C. projections the universities face cuts of around 11 per cent over the next four years, the equivalent of the closure of five average-size universities.

Although in the first year of the new funding plan no university will face cuts in real terms of more than 1.5 per cent than the average loss, the cuts announced in May 1986 seem to indicate the direction in which the grant will move. Table 7.3 shows the percentage change in cash and planning numbers of each university. The universities are banded into three groups.

In the top group we have those institutions which on initial calculations did better than the average. It is interesting to note that this group includes Salford, the university that was worst hit by the 1981 U.G.C. Cuts.

The middle group shows those institutions which had changes in grant that fall between the range of -0.5 per cent to +1 per cent. In this group we find Aston, another university which was badly cut in 1981.

Because of the self-imposed safety net, the maximum reduction applied to any university is a fall of 0.5 per cent in cash terms as compared with 1985/86. The bottom group of the table shows those institutions which would have had a bigger cut according to the initial calculations but are protected by the safety net. This group includes the university of Keele which again was one of the worst hit universities.

TAPLE TO SHOW PERCENTAGE CHANGE IN CASH AND PLANNING NUMBERS

% CHANGE IN

UNIVERSITIES	Cash 85/86 - 86/87	Planning Numbers 85/86 - 89/90
Warwick * Bath	+ 4.03 + 3.55	+ 20.7 + 4.5
Southampton York Bristol Sussex Kent * Loughborough Exeter Glasgow * Strathclyde Leicester Manchester * UWIST London Nottingham Essex * UMIST * Salford	+ 5.12 + 3.08 + 2.70 + 2.56 + 2.48 + 2.13 + 1.86 + 1.85 + 1.68 + 1.67 + 1.52 + 1.51 + 1.51 + 1.51 + 1.51 + 1.39 + 1.07	+ 7.7 - 7.7 - 7.7 - 1.0 - 2.2 - 3.9 - 1.0 - 4.5 - 5.5 -
Birmingham * Surrey * Bradford Cambridge Lancaster Leeds * Brunel Sheffield Liverpool * Heriot-Watt Reading Oxford * Aston	+ 0.76 + 0.73 + 0.70 + 0.69 + 0.68 + 0.57 + 0.46 + 0.45 + 0.42 + 0.42 + 0.09 0.00 - 0.25	+ 5.5 + 15.1 + 9.6 - 10.4 + 0.1 + 8.9 + 1.2 + 23.5 - 1.4 - 3.6
Edinburgh Cardiff Newcastle Hull St. Andrews Aberystwyth	- 0.26 - 0.26 - 0.28 - 0.33 - 0.37 - 0.45	+ 0.3 + 1.9 + 0.9 + 7.5 + 2.0 + 5.5
MAXIMUM REDUCTION: Aberdeen Eangor City Durham Dundee East Anglia Keele	- 0.50 - 0.50 - 0.50 - 0.50 - 0.50 - 0.50	+ 0.7 + 8.5 + 15.4 + 7.0 + 6.3 + 1.0 + 3.8
Stirling Swansea	- 0.50 - 0.50	+ 6.1 + 11.5

^{*} Technological University

Source: Aston Fortnight. May 1986

It is interesting to compare the position of the universities of our case studies i.e. Aston, Bath, Keele and Salford on Table 7.2 which relates to the 1981/84 Cuts and Table 7.3 which relates to the 1986 Cuts.

The position of the University of Bath is unchanged. It is in second place in the 1981 Table and second in the 1986 Table. From the bottom place in 1981 Salford moved up into 19th position in 1986. Aston's progress is not so dramatic. Still it succeeded in moving up from the bottom group to 32nd position, a considerable improvement, but not perhaps as much as one expected. Finally we have the University of Keele which in 1986 is still with the bottom group as it was 1981.

Our case studies on these universities were completed at the end of 1985. We do not feel that the 1986 U.G.C. Cuts entail any drastic changes in the arguments put forward and conclusions reached in the respective cases.

We trust that our case studies will pinpoint some of the reasons for the positional improvements or otherwise achieved by these universities.

The Development of Higher Education in Malta up to 1980

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Chapter 8

The Development of Higher Education in Malta up to 1980

8.1 Introduction

The object of this Chapter is to give a brief description of the developments of Higher Education in Malta until 1980. First we look briefly at the development of the University of Malta until 1972. Then we look at the foundation of the Malta College of Arts, Science and Technology (MCAST) and of its main activities until July 1978, when it became the New University. We will then examine the setting up, functions and recommendations of the Dahrendorf Commission and the 1974 Education Act. The 1978 Reforms and the reactions to these Reforms are then examined in some detail. Finally we look at the brief period when Malta had two Universities, until 28th March 1980, when it again reverted to one University.

Besides the University and MCAST the other institutions of higher education in Malta were the two Colleges of Education, one for female trainees run by the Sacred Heart Nuns and the other for male trainees run by the De La Salle Brothers. Established in the mid-fifties they continued as separate institutions until they were amalgamated into the Malta College of Education in 1972. In 1975 the Malta College of Education was transferred to MCAST and it became

Though for nearly twenty years the two Colleges of Education formed a part of Malta's higher educational set—up it was not felt that for the purpose of our analyses they needed to be looked at separately. This in no way diminishes the immense contribution they have made to the development of Education in Malta during their existence.

8.2 The University of Malta

The origins of Malta's university date back to the later 16th century when the Collegium Melitense was founded by the Jesuits on the 12th November 1592. In 1676 Grand Master Nicholas Cotoner established a school of surgery and anatomy at the buildings of the Holy Infirmary of the Order of St. John in Valletta. On 7th June 1727 Grand Master Manuel De Vilhena gave his exequatur whereby the Collegium Melitense was empowered to confer academic degrees.

In 1768 Grand Master Manuel Pinto proscribed the Society of Jesus and seized all its property in the Maltese Islands. After protracted discussions, Pope Clement XIV acceeded to Pinto's supplication and empowered him to institute a public university of general studies. On 22nd November 1769 the Grand Master proceeded with the public action of a charter empowering the institution to grant degrees. In 1798, however, Napoleon occupied the islands and the University was

suppressed. The University reopened its doors and reverted to the arrangements instituted by Pinto in 1800, following the islands move to British rule ¹.

During the 19th century the university continued to strengthen its courses. Various commissions were set up to enquire into the state of education in Malta as well as into the statutes and rules of the University. Examinations were regularly reviewed and faculties were reformed and reconstituted from time to time.

Early in the 20th century (5th June 1901) the University obtained recognition for its medical degree throughout the British Empire. The 1915 statute enabled the University to increase its faculties from four to six, and the seventh faculty was added in 1954.

In 1936 King George VI accorded the University his formal patronage and the official designation 'Royal'².

From 1945, Malta's University was enabled to assimilate the new educational insights of post War World, and to benefit from the Asquith Report³ on Higher Education in the Colonies and the newly created Inter-University Council for Overseas Territories. Full autonomy was vested in the Royal University of Malta by Ordinance XXXII of 1947, which placed the Nation's highest academic institution legally on a par with the Universities of the United Kingdom.

About this time, however, the University was experiencing financial difficulties. In 1956 a joint Government University Commission under the Chairmanship of Sir Hector Hetherington was appointed by both the Government of Malta and the Royal University of Malta to advise on future development.

The key recommendation of the Hetherington delegation 4 was the establishment of a Statutory Commission whose principal function should be to serve

"as the body of final authorization in the sense that its approval would be required for every major act of the university which called for new expenditure: but, as far as possible it should also be available to assist the University to work out its new policies. The initiative in devising the policies would lie with the University: but Government would release funds for execution of these policies only within limits approved by the Statutory Commission. If the University and the Statutory Commission were to plan and act realistically they must know in advance at least the general scale of the finance which the Government is prepared to make available"5.

In the decade following the Hetherington Report the university made good progress both in its academic and physical developments. The triennial entry system was at last changed; in 1959 students were accepted annually into arts and science courses; in 1962 entry to professional courses became biennial and from 1965 engineering students were admitted each year.

The decade following the Hetherington Report was perhaps the most important in the university's long history.

Politically the period was one of uncertainity and change - at first negotiations for Malta's integration with Britain, then the imposition of direct rule from 1958-62, then internal self Government and finally independence in September 1964. In this mutable atmosphere the Statutory Commission ensured a continuity of policy in respect of university development so that by the end of the decade the university stood academically revitalised, financially sound and splendidly housed on a commanding site outside Valletta.

In November 1960 Messers Norman and Daubars a firm specialising in University construction were asked to prepare a master plan in association with a local firm of architects. Actual construction work at the new site at Msida started in early 1963. The Prince of Wales inaugurated the campus in November 1969 during the bicentenary celebrations.

By the beginning of the seventies the Royal University had over one thousand students in seven faculties, that is: Theology, Laws, Medicine and Surgery, Dental Surgery, Engineering and Architecture, Arts and Science.

Though a small nation with a distinctive language and culture, the facts of history and geography obliged Malta to be cosmopolitan. For a long time, however, its university remained relatively isolated and uninfluenced by change elsewhere; but as the strength of the university grew, academic

contact became easier. Gradually scholars from Britain and the continent of Europe began to visit Malta in greater numbers. Some lectured; some served as external examiners; others acted as consultants in library development, university administration and other fields. the contact in one direction only. Foundation assistance enabled Maltese Staff to travel abroad more regularly. Relationships grew with university departments abroad. 1957, for example, a programme of economic research in Malta began jointly with the University of Durham and in 1963 a Malta language survey was undertaken in co-operation with the department of Semetic Languages and Literatures at Leeds. The medical faculty developed contacts with Liverpool and London; and a link with Queen's University, Belfast, in 1967 helped to strengthen teaching in economics. Such contacts were not confined to Britain; plans were made also for co-operation with the universities of Paris and Messina and with the Institute of Social Studies in the Hague

While developing its contacts with Europe and the Commonwealth, the university came to terms more and more with its central Mediterranean position. It created links with universities in the region such as Palermo; its language laboratories were increasingly used for foreign students attending vacation courses in English; it acted as host to courses in marine biology for scientists from

Mediterranean countries; and its staff played a part in the activities of the Mediterranean Social Science Research Council. In research, too, initiatives were taken in subjects of importance to the region, for example, in studies aimed at finding means of control of the parasitism of crops by the orobanche species, exploiting the biological and mineral resources of the sea and tackling problems of coastal pollution.

In spite of the inherent difficulty of change in a small university, much was accomplished between the Royal University of Malta's emergence from the ravages of war and 1970, more indeed than its staunchest friends in the Inter University Council could easily have envisaged in 1946. Much, however, still remained to be done, if the university was to succeed as a constructive force in creating a better life for future generations of Maltese in a world of growing complexity.

8.3 The Malta College of Arts, Science and Technology

Until the end of the 1950's the University of Malta and the two Teacher Training Colleges were the only institutions of higher education in Malta. With the industrialisation drive of the 1950's and the diversification of the Maltese economy from one based on an island fortress

and agriculture to one based on industry and manufacturing, the manpower requirements for technicians and engineers gave inpetus to the demand for an institution to cater for post secondary and technical education to meet Malta's manpower requirements. So it was that in 1961, the College of Arts, Science and Technology was set up to meet these demands.

The Malta College of Arts, Science and Technology, or as it was more commonly called, the Polytechnic, was built and equipped with funds from UNESCO and the British Government. The College played an important role in the life of Malta, during its eighteen years of existence.

On the University side, no further development of engineering degree courses had been made since the inception of the Engineering and Architecture course some fifty years earlier. No courses existed for civil, mechanical, or electrical engineering degrees. The standard of the laboratories and teaching staff of MCAST was therefore aimed at making these courses available in the College, and in 1963, the first students commenced their studies for the B.Sc. degree in Engineering of the University.

In addition, other students were admitted to MCAST to pursue the same course of studies but leading to the award of the Diploma of Engineering (Dip. Eng.) of the College.

This situation came about because of the matriculation requirements of the University which excluded some candidates who would however have been qualified to take an Engineering degree course at a British University or College. This affiliation had many parallels in Britain. One example is the Manchester University Institute of Science and Technology. Before its complete integration with Manchester University, this Institution existed for many years as a College under the jurisdiction of the Manchester City Council and offered degree courses in engineering of the University, whilst at the same time offering a wide selection of nongraduate technical courses.

The Polytechnic was initially founded in 1961 to provide post secondary and technical education to meet the Country's manpower requirements for technicians and engineers. During this period Malta was going through its first Development Plan whose main objective was to change the economy from one based on defence to one based on industry, commerce and tourism. To meet the manpower requirements in these areas the scope of the College was extended by the establishment of the Department of Business Studies in 1963 and the Department of Hotel Administration, Tourism and Food Technology in 1965.

The Department of Business Studies provided a wide range of courses in Commerce, Eusiness Studies and Management.

The standard of courses ranged from Advanced Level Courses in Commercial subjects to courses leading to the examinations of professional bodies in Malta and in the U.K.

The Department of Hotel Administration, Tourism and Food Technology provided training and educational facilities for all types of courses both part time and full time, in Hotel Administration, Tourism and Food Technology from craft to Management level.

Besides the above five departments there was also a Servicing Department which, as its name implies, provided services to the other departments, in Mathematics, Science, English and General Studies.

During its eighteen years of operations the Polytechnic formed part of the Department of Education and as such it suffered from the bureaucratic controls of a Government department especially in the latter years. During the sixties and early seventies there was a Board of Governors, which was representative of the main commercial, industrial and parastatal organisations on the island. The Board of Governors advised the Minister of Education on the administration and General Management of the College, including the provision of funds. There was also an Academic Committee which consisted entirely of members of Staff of the College, which made recommendations to the Board of Governors upon

courses, upon entry qualifications, and all the necessary arrangements for the conduct of the courses and examinations and the award of diplomas and certificates.

With the setting up of the Commission on Higher Education in 1974, which included the Principal of the Polytechnic, the Board of Governors ceased to function and the Polytechnic came more and more under the control of the Department of Education.

One could easily compare the system of higher education existing in Malta then to the binary system existing in the U.K., where the Polytechnics are under the direct control of Local Education Authorities, whilst the University system is indirectly controlled through the University Grants Committee. In Malta the Polytechnic came under the direct control of the Department of Education whilst the University of Malta was regulated by Statutory Commission and Triennial Grants.

During the eighteen years of its existence the Polytechnic played a vital role in Malta's Higher Education system and it helped to train hundreds of young men and women to take an active part in the industrial, commercial and touristic developments which took place since the late fifties. There is no doubt that the trained personnel coming out of the Polytechnic was an important contribution

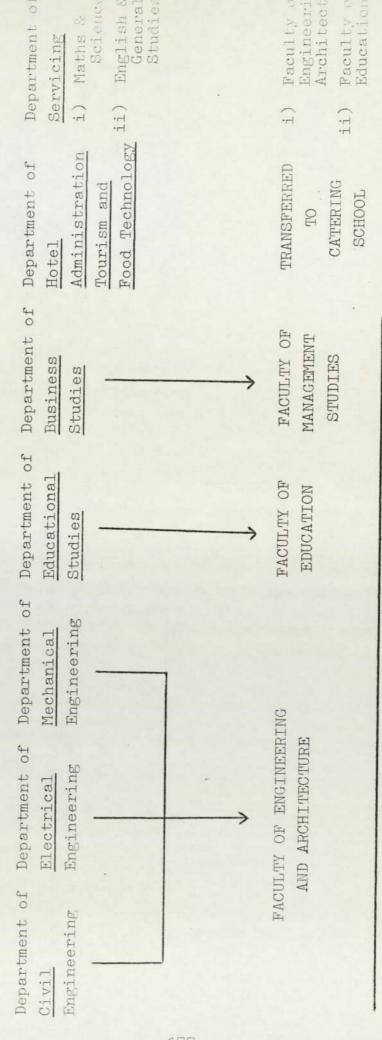
to Malta's changing and developing economy.

By the Education Act of 1978⁶ the Polytechnic ceased to exist. The three Departments of Engineering became the Faculty of Engineering and Architecture, the Department of Educational Studies became the Faculty of Education, whilst the Department of Business Studies became the Faculty of Management Studies of the New University. The Mathematics and Science section of the Services Department became the Department of Mathematics and Science in the Faculty of Engineering and Architecture, whilst the English and General Studies section was merged with the Faculty of Education. The Department of Hotel Administration, Tourism and Food Technology had in the meantime been transferred to the Conference Centre in Valletta and established there as a Catering School.

The following chart shows the various departments of MCAST and the change which took place by the Education Act 1978. At that time there were over 1,300 students studying at the Polytechnic.

Figure 8.1 - Chart Depicting the Departments at MCAST in July 1978

MALTA COLLEGE OF ARTS SCIENCE AND TECHNOLOGY



8.4 The Dahrendorf Commission

With the return of the first Labour Government since Malta became independent in 1964 it was becoming evident that changes were to be made in the educational sector. In July 1972, the then Prime Minister of Malta appointed a Commission to advise the Government

"on how best its social and economic policies could be achieved through a liberal free University"7.

This Commission was under the Chairmanship of Professor R. Dahrendorf.

The Dahrendorf Commission submitted the first part of its report in November 1973. In this report the Commission dealt with the role of the University in Maltese society and the structural changes required to fulfil that role. According to the Report

"National development consists in providing the necessary conditions for the realisation of full physical and mental potential of all citizens and the national development efforts must be directed at meeting the basic needs of the whole population. The Royal University of Malta has an important part to play in this process".8

The Commission believed that the purpose of the University should be seen not only as an end in itself but also as an essential means towards realisation of defined national

objectives. Success should be measured not only in terms of the national reputation of a particular scholar or a group of scholars, but in terms of the degree to which the university community has participated in and contributed to the solution of the country's development problems. The University therefore had to start measuring its academic achievement not only in terms of a notion of excellence but also in terms of the relevance of its efforts to the country's need.

The Commission believed that on past evidence there was no doubt of the University's willingness to contribute, in as practicable a manner and as fully as possible, to the country's development. However, the Commission felt that optimal results would be obtained if the University was integrated more closely within the system of tertiary education. A balance had to be struck between integration and the need for administrative and budgetary freedom which goes with a legitimate interpretation of academic freedom.

In reviewing the powers and duties of the various organs of the University in the light of the tasks and needs governing its development, the Commission found a number of important gaps. The Commission listed a number of tasks which were not being performed at all, or not performed in a satisfactory manner.

- " (i) Identification of the needs of the country and the society of Malta as they become relevant to developments in higher education.
 - (ii) Coordination of activities in the different sectors of higher education so as to provide a comprehensive and complementary system of tertiary education and research through the best use of existing facilites.
- (iii) Continuous dialogue between Government and the University with a view to implementing the needs perceived by the Government and to strengthen the sense of purpose of the University within the framework of the requirements of academic freedom.
- (iv) Initiation of new developments in the fields of training and research which extend beyond existing developments and require an independent impulse and phasing out of activities which are no longer relevant or in which education and training can more suitably and more economically be provided abroad".9

The Commission proposed that the Council should be retained as the governing body of the University, with essentially the same powers as before, including detailed financial control and appointments, but with somewhat different emphasis. The Senate was to continue to exist as a wholly academic body and it should feel itself free and indeed encouraged to seek advice from other countries on academic development.

As it was considered that the Council should be the body where effective dialogue between the Government and the University takes place, recommendations were made as to its future composition.

The Commission also recommended the setting up of a Commission for the Development of Higher Education with very wide powers. This Commission was to be composed as follows.

- (a) A Chairman an independent person appointed by the Prime Minister;
- (b) Six Members consisting of the Vice-Chancellor of the University, the Principal of the Malta College of Arts, Science and Technology, the Principal of the Malta College of Education, and three other members representing different Ministeries, including those of Education and Finance;
- (c) A further number of members from among Members of Parliament, the Trade Unions, Employees Associations; and
- (d) A number of members representing academic interests overseas.

The main functions of the full Commission were those listed above (1 to IV). It was to be concerned with assessing needs and with the giving of advice on how these needs can be met. In financial matters the Commission would act through its Standing Committee. The Chairman and the six members listed in (b) above were to form the Standing Committee of the Commission.

The main recommendations of the Dahrendorf Commission were accepted by the Government and implemented in the Education Act 1974 which came into force on 3rd September 1974. A further amendment to the Education Act 1974 changed

the title from the 'Royal University of Malta' to 'University of Malta' as from 18th June 1976

The Dahrendorf Commission submitted the second part of its report in September 1974¹². In this report various recommendations were made about every faculty. Although the proposals in the report were reasonable enough in themselves they failed to come to grips with the problems posed by the small, close knit society that exists in Malta. For instance, the report remarked on the lack of liaison between the university and the government, and, as remedy, suggested the inclusion of more government appointees on the university council as well as the setting of the Commission on Higher Education.

However, in Malta, it is extremely difficult for someone appointed by the Government to make any decisions even
trivial ones without reference to his appointees. The
commission became a talking shop and the university council
completely polarized. With such paralysis at both executive
and consultative levels the academic provisions of the
Dahrendorf report remained a dead letter - in some cases
through university reluctance, in others because the
government refused to implement them.

In September 1976 the Malta Socialist Party was returned for a second term in office. It soon became clear that the next few years were to witness radical changes in the system of Higher Education in Malta. These dramatic changes which the Government wanted to introduce were spelt out in a White Paper, Tertiary Education - Proposed Reforms 13, published in June 1978.

8.5 The 1978 Reforms

The White Paper, Tertiary Education Proposed Reforms, was published in June 1978. It stated that since the Maltese people had decided

"to change for good their country's traditional role of an island fortress into a base of peace, their choice of a new way of life founded on peaceful endeavours and initiatives in the fields of manufacturing, ship repairing and ship building, agriculture tourism and other honest activities necessitates a correspondingly radical change in the country's institutions. Therefore the Maltese Socialist Government turned its attention to higher education and carried out a careful examination of the reforms that were indicated to ensure that a country's new requirements and faster tempo of development were adequately served at the level of tertiary education"14.

According to the White Paper it was the Government's responsibility to determine the amount of public funds which the country could afford to devote to tertiary education, to indicate the priorities of the nation and ensure that the country's limited resources were utilized for the maximum benefit of the whole nation. The Government

was also to ensure that the governing institutions which provided tertiary education were so constituted as to give sufficient guarantees that priorities could be kept, wastage avoided, and that some planning attempted which would keep an acceptable relationship between the number of professional personnel needed and that coming out of university.

It was the Government's intention to have two separate universities which would be known as the New University and the Old University. The reforms were to be implemented in the New University.

In order to achieve the above objectives a number of changes were proposed by the White Paper. The first important reform proposed was to have four employers representatives on the University Council. They would take part in the planning of academic pursuits and hopefully set in motion the machinery which would ensure a flexible response to the changing requirements of modern society.

A second important innovation concerned the financing of tertiary education. The funds would be provided by the State. The University would have to prepare a budget each year and this would be submitted to and discussed in Parliament. The University authorities would be expected to explain and justify the proposed allocation of available funds but the final decision would be taken by the House

of Representatives.

The third and perhaps the most important innovation was the introduction of the worker-student scheme. All university students would be employees of various organisations which required their services as workers while they were at their place of work and which would eventually require their professional services once they completed their studies. Where work relevant to studies was practicable, it was to be preferred to other work but the periods of work were to be periods of non-academic work and not necessarily related to academic training or experience. The employer was to take full advantage of the period of work and the work performed had to justify the full salary the worker student was to be paid both whilst he/she was at work and while at university.

The selection of students for university courses was to be entrusted to an independent Selection Board, but the (academic) entry qualifications set by the university must be satisfied.

The worker/student system was being proposed by the government because it believed that the system had a number of advantages.

It was hoped that the system would bring tertiary

education within the reach of those who desired it and deserved it no matter which walk of life they came from. It planned to make the student independent by giving him/her the opportunity of earning a decent living during his/her university years. And it was hoped that the professional classes would be brought closer to the working community. Finally, the system would provide the student with a gainful occupation in which his/her academic qualifications could be fully utilized for the benefit of himself or herself and for the community.

According to the White Paper, the Government

"hoped that the reforms outlined above could have been achieved by a willingness on the part of the present university to change its old ways and adapt to the needs of a modern society.... Indeed the response from the authorities of the University, without whose whole-hearted support the reforms cannot take place, has regrettably, been a negative one; and the Government has been left with no alternative but to push forward those reforms" 15.

It would perhaps be unfair to suggest that the University authorities were completely unresponsive to the Government demands for reforms. A number of meetings were held between representatives of the University Authorities and of the Government. The University also submitted a draft report on the restructuring implications of the studentworker concept in tertiary education 16. But since the Government went on to implement all its proposed reforms in

the New University, one can perhaps assume that the University's proposals did not go far enough to meet the Gvoernment's stated objectives.

Thus on 4th July 1978, an Act was passed through the House of Representatives in Malta, so that

"there shall be two institutions for higher education: one shall be a new institution to be known (and is in this Act referred to) as the New University, and the other is the institution already in existence which shall be here after known (and is referred to in this Act) as the Old University"17; each of which "shall be a separate statutory body, having a legal distinct personality.... and of having and using its own seal"18

Furthermore, the branches of learning assigned to each of the Universities were:

- (a) accountancy, administration, business management, architecture, engineering, medicine and surgery, dentistry, pharmacy, education and related branches of learning are assigned to the New University, and
- (b) science, the humanities, law and theology are assigned to the Old University.

The New University took over most of the departments of the MCAST, plus the Faculty of Medicine and Surgery, the Faculty of Dentistry and the Departments of Civil Engineering and Architecture from the Old University.

The Old University was left with courses which were all

being phased out, except for the Course of Law and the Course in Catholic philosophy and theology, which, after consultations with Church authorities, it was decided that in future it would be provided by the Catholic Church in its own institution.

Like the early universities at Salerno, Bologna and Paris respectively, the university of Malta had its medical faculty, its teaching in civil and canon law and its studies in theology and philosophy. For over two hundred years these branches of learning were all taught and researched at the 'Old' University of Malta. It is ironic that from 1978 they were to be taught and researched in three different and completely separate institutions.

8.6 "Reactions" to the 1978 Reforms

The Education Act of 1978 was one of the most controversial and hotly debated pieces of legislation enacted in Malta.

The International Association of University Professors and Lecturers (I.A.U.P.L.) was one of the main international organizations which criticized the new higher educational set—up and its Memorandum on the Education Act stated that

"from the evidence available to it 'the principal conclusion drawn by IAUPL' is that the 'New' and the 'Old' universities established by the Act of July 1978 in Malta will be most unlikely to win approval for a title which has been conferred by law, but which will not be taken seriously in any of the countries which have for decades past accorded that status to the ancient Royal University of Malta"19.

The IAUPL Memorandum then goes on to list the main reasons for reaching this conclusion. These were:

- (a) the appointment of academic staff was not under the control of the university;
- (b) the selection of students was not in the University's hands;
- (c) the study work scheme was unworkable, because the periods of work were not integrated with those of study so as to ensure the continuous development of the student under unified programme and undivided control;
- (d) substantial changes in conditions of employment were introduced with no formal negotiations with the relevant trade unions; and
- (e) neither University was likely to be large enough to be academically viable.

For these reasons the IAUPL concluded that the degrees of the two universities would not be recognized by academic authorities abroad.

Professor Dahrendorf, who had been involved with higher education in Malta since the early seventies in his letter to the Prime Minister, resigning his post as a member of the Commission for the Development of Higher Education wrote,

"I cannot continue to be identified with policies in higher education which offend my values, are out of line with my experience, and contradict the recommendations which I have made in the past"20.

Another member of the Commission for the Development of Higher Education, Professor J.H. Horlock, then vice-chancellor of the University of Salford in his letter of resignation from the Commission stated that he did not agree with the 1978 Education Act on three major points: it created two universities, while he had consistently argued that the Polytechnic (MCAST) should be incorporated with the University as a Faculty of Technology; the selection of students should be wholly a University responsibility and not given to any outside body; and the insistence of the Government as shown in the preamble to the Bill that the

"work semesters are deliberately periods of non academic work and not of academical experience or academic training".

Professor Horlock had consistently argued for

"integrated sandwich courses particularly in engineering in which there is a very close integration of the periods of academic study and industrial experience"21.

In a Leader published in 'The Teacher' the organ of the then Malta Union of Teachers it was stated that "Malta has never before witnessed such a disastrous educational and industrial situation. The wanton destruction of the University of Malta and the dastardly all out attack to suppress the trade union movement have been strongly deplored locally and abroad".

"in the past eighteen months",

continues the Teacher's leader article,

"the Governemnt of Malta has collected a most impressive but altogether unenviable record of black marks for its ruinous educational policy and its despotic industrial practice. The World Medical Association; the World Confederation of Labour; The International Federation of Employees in the Public Service; The International Association of University Professors and Lecturers; The World Confederation of Organisations of the Teaching Profession have all adopted resolutions condemning the Government of Malta. Even the advisors appointed by the Government itself resigned in protest against the reforms"22.

It was in this turbulent setting and predictions of doom and certain failure that the 'New' University started its operations in 1978.

In our case study of the University of Malta,

(Chapter 14) we shall examine briefly the operations of the

University of Malta until early 1986. We will see how the

University adapted and changed, and how through a combination

of various factors, such as the relative flexibility shown

by the Government since the introduction of the scheme, the

acumen and drive shown by the leadership especially since

1982, and moreover the determination and hard work shown by the academic staff, none of the above predictions have materialised and the University of Malta not only survived the upheavels of the late 70's, but in the late 80's, it should be better placed to contribute to the solution of the country's development problems.

8.7 The Two Universities

We have seen in Section (8.5) that the 'Old'
University was left with sciences, humanities, law and
theology. Even before the passing of the Education Act 1978
no new courses were started in the science and humanities.
Uncertain of student numbers, and anticipating the eventual
demise of the 'Old' University as a separate institution,
academic staff began to quit, many seeking jobs abroad and
others joining industrial and commercial organisations.

In fact as the months went by the Government made it clear that it would no longer support the Arts and Sciences as separate faculties. The Faculty of Theology was already transferred to the Church's own College; thus the only remaining Faculty in the 'Old' University was the Faculty of Law. There was no longer scope for two universities.

In the meantime the 'New' University was operating the

worker/student scheme in its five faculties, namely, Dental Surgery, Education, Engineering and Architecture, Management Studies and Medicine and Surgery. By the beginning of 1980 there were over 600 worker-students in these five Faculties.

A further amendment to the Education Act (1974) was passed by the House of Representatives on 26th March 1980²³ and the Minister of Education appointed the 28th March 1980 on which the said Act would come into force²⁴, so that 'the New University (in this Act referred to as the University) shall continue, under the name of The University of Malta, to be a statutory body having a distinct legal personality... and the University shall also succeed to all functions, property and other rights of the Old University and shall have power to continue any instruction previously provided by that University.²⁵.

Thus the Faculty of Law was the last Faculty to admit students to the student-worker system. Special arrangements were made with respect to students who were receiving instruction at the Old University, so that there was continuation and at the same time phasing out of the day courses leading to the degrees of B.A. and B.Sc., as well as the evening B.A. Course.

Once again the Council was to be the supreme organ of government of the University and the administrator of the

property of the university. Apart from retaining its previous functions and powers, the Council had to submit, before the end of June of each year, estimates of its financial requirements for the following year commencing on 1st January, and proposals for the allocation of its resources to the Commission, which in turn would make a report to the Minister containing its recommendations on the estimates and proposals submitted to it.

The constitution of the Council of this one University is as follows: The President

The Rector

Members (3) appointed by the Prime Minister
Members (4) appointed by the four employers
employing the largest number of Worker
Students.

Member (1) appointed by the Trade Union representing the largest number of persons employed by the employers referred above.

Member (1) appointed by the Worker Committees of the above employers.

Members (3) of the Academic Staff of the University appointed by the Senate.

Member (1) of the Academic Staff of the University elected by the Academic Staff.

Member (1) elected by and from the Student Body of the University. Member (1) elected by and from the Non-Academic Staff of the University.

The Registrar is to act as Secretary to the Council.

The Constitution of the Senate was to be the Rector as Chairman, one representative from each of the six faculties, the Secretary of the Commission for the Development of Higher Education and a Student Representative.

The composition of the Board of Faculties consisted of the representative of the faculty on senate who is ex officio chairman of the board, the heads of departments of the faculty, two representatives of the academic staff of the faculty, one member appointed by the employer employing the largest number of worker-student in the faculty, one member elected by the employers who provide work related to a subject taught in the faculty; and one representative of the student body of the faculty elected by and from that body.

The Senate was to have the general direction of the academic matters of the University, and the Board of each Faculty was to be the advisory body to the Senate and to the Council on academic matters concerning that faculty.

Therefore, in less than two years, Malta reverted to one University namely The University of Malta and the

anomalies and problems created by having two universities in such a small country were thus removed.

PART THREE

Some Practical Aspects of University Management

Chapter 9	The Methodological Approach Used in the Study
Chapter 10	Aston University - Towards Survival, Stability and Excellence
Chapter 11	The University of Bath - A Study of Academic Management Strategy
Chapter 12	The University of Keele - Suffering for the Sake of Diversity?
Chapter 13	The University of Salford - A Case of Diversity in Activity, Direction and Emphasis
Chapter 14	The University of Malta 1980-1985
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The Methodological Approach Used in the Study

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Chapter 9

The Methodological Approach Used in the Study

9.1 Introduction

In the first chapter we have listed a number of problems/questions to which this study attempts to address itself. These questions relate mainly to the challenges facing universities in a period of rapid change. We have seen that conflicting demands on their resources and financial stringency have produced new stresses within them. In the past, universities were capable of growing in many directions without having to assess missions or purposes, and without being specifically accountable, financially or otherwise, to funding agencies or the tax-paying public. That period has ended, and as fully illustrated in this study, universities are increasingly being asked to justify themselves.

In studying and analyzing the response of a number of universities, to these new problems and challenges, it is hoped that we can learn more about the dynamic process of change and the factors that are likely to facilitate it.

9.2 The Case Study as a Methodological Framework

This study originated at the University of Malta, and it was originally envisaged that it would be an intensive investigation of the changes which took place at that University since 1978 and their implications. According to Baldridge the case study method has a number of advantages. First, it is the classical method of researchers interested in depth of study. Moreover the case study allows many different techniques to be applied in the same situation.

The second major advantage is that case studies are carried out in the field, with the sounds, sights and smells of the situation hitting the researcher in the face. The "feel" of the situation is a vital part of the intellectual experience. There are thousands of intangible, unnoticed, and almost imperceptible experiences that go to make up an overall impression of the situation. The case study is perhaps unique in this sense.

The third major advantage of case studies is their usefulness in exploring the processes of an organisation. The sophisticated social observer knows that official documents hide a wide, informal, dynamic set of processes that can be understood only by participation, observation and depth interviews. The case study, executed in the field, in the midst of this on going process has distinct

advantage to anyone who is concerned with the dynamics of change.

The case study method has two major weaknesses. First, concentration on only one case makes it virtually impossible to make use of contrasting situations. When a number of organizations are compared, the parallels and difference between them often provoke useful insights. The second problem is the problem of "typicality" or "generalization". Researchers always hope to find results that can be applied to many situations, not just to the one they are studying. In one case study there is no assurance that the organization chosen for study is representative of other similar organizations. In fact, it may be unique.

It was felt that because of the untypical and perhaps unique situation, a research project which was based solely on the University of Malta would suffer particularly from these weaknesses. The study would be less amenable to generalisation and thus less useful.

On the other hand it was felt that if a number of English universities were included in the study, the comparative perspective of institutions in different economic, political and social environments would give added dimensions to the study.

In view of this the study was extended from the single case study of the University of Malta to cover also four English universities, namely, Aston, Bath, Keele and Salford.

9.3 The Methodology of the Case Studies

As well as undertaking a review of the relevant literature, this study has thus chosen the multiple case study method, in relation to the selection of countries, and also the selection of specific institutions on the basis of comparative interests and of accessibility. It is on these basis that this study was eventually set up.

Thus this study attempts to evaluate the process of change in a university in a period of increasing pressures and demands, by comparing in the form of individual case studies and a comparative review chapter the changes which took place at the universities of Aston, Bath, Keele and Salford in England, and the University of Malta, concentrating mainly on the period 1978-85.

The four English universities in this study were all granted their Charter in the 1960's. Aston, Bath and Salford were Colleges of Advanced Technology and became (at least originally) Technological Universities. At Keele the arts and pure sciences predominate. Aston, Keele and

Salford were three of the four worst hit universities by the UGC 1981 Cuts, which by their nature precipitated changes in the strategy and management of these universities. The harsh cuts inflicted on these universities by the UGC seemed to indicate that the UGC was not satisfied with the way things were going in these universities, a conclusion which is confirmed by Sir E.Parkes's letter to The Times². Thus, if they were to avoid such harsh cuts in the future, they would have to make changes and make them fast. Our case studies are a description and analyses of these changes.

In contrast, the University of Bath was one of the 'chosen few', and was only marginally cut. Our case study of this university assesses why this was so. The above factors, plus the accessibility and facilities that were made available to the writer were the main reasons why these universities were chosen.

Besides being the institution which financed this study, and the location where the writer/researcher is primarily based, the University of Malta itself has undergone many changes since the late seventies. It was felt that it would be interesting to compare the process and management of change in a developed and in a developing economy. As this research developed, the complexity of

a comparison across national boundaries became apparent in view of the deep cultural, economic and political differences in the environments of the two sets of institutions. The way in which these cases were developed was through a combination of interviews, group discussions, questionnaires, participant observations and document studies. The extent to which the various methods were used in the respective institution is outlined below.

The first stage of each case study usually consisted in a number of interviews with a variety of university personnel, academic and administrative.

A relevant set of topics were usually discussed in line with the list of Research problems/questions listed in Chapter 1. These topics were brought up for consideration during the interview. The questions were open ended with the respondent making whatever comments he/she wanted about a topic, branching off on to any relevant side issue. Whenever possible, however, the interviewer was encouraged to give his opinion on each of the topics outlined in the research problems/questions list.

The personal interview is one of the more common techniques used by social scientist. It is also one of the basic techniques used in this study. Miller distinguishes a between the 'focused' interview and the 'free story' interview.

In the 'focused' interview .

"the interviewer focuses attention upon a given experience and its effect. He knows in advance what topics or questions he wishes to cover".

In the 'free story' interview, "the respondent is urged to talk freely about the subjects treated in the study" 5.

It can be said that in our study the personal interviews were generally a combination of both the focused and the free story.

In the cases of Bath, Keele and Salford it was necessary at the outset to make an initial visit to interview appropriate academic and administrative personnel. The object of this initial visit was to gain an overall picture of how the respective institutions reacted to the external challenges and to what extent they had adapted and changed in response to these challenges and the main factors facilitating this process.

9.3.1 The University of Bath

Three one day visits were made to the University of Bath. The first one was to the Head of the Department

chancellor for a number of years. The major issues and developments at the university since the early seventies were discussed. Information was also collected on the organisational framework of the University including the administration and the academic process. The second visit was mainly to the office of the Planning Officer. This visit was mainly concerned with examining in some detail how management strategy and policy was formulated. Since the writer had spent fifteen months at Bath during 1969/70 his experiences at this university were not entirely new. Through his previous contacts with the university a third visit was arranged in which a number of members of the academic staff were interviewed.

9.3.2 University of Keele

Two visits were made to the University of Keele, each lasting two days. Besides members of the academic staff the persons interviewed during the first visit included:

The Deputy Vice-Chancellor

The Registrar

The Assistant Registrar (academic)

The Deputy Finance Officer

The Senior Tutor

The Chairman of the Board of Humanities

The Head of Department of Economics and Management Science

The Senior Tutor

The Librarian

The Appointments and Counselling Services Officer.

The second visit took place about six months later during the Conference for Heads of Schools, which is one of the Marketing and Publicity activities carried out annually at Keele. During this visit the opportunity was taken to update oneself with what had taken place since the earlier visit. Interviews were held with the new vice-chancellor, and further interviews and group discussions were held with the Registrar, Assistant Registrar (academic) and the Deputy Finance Officer.

9.3.3 The University of Salford

Two one day visits were made to the University of Salford. During the first visit, besides members of the academic staff, the personnel interviewed included:

The Pro Vice-Chancellor

The Director of Campus

The Director-Advanced Manufacturing Technology Centre

The Deputy Registrar (academic)

The Deputy Registrar (finance)

The Public Relations Officer

During the second visit, a joint meeting was held with the

Deputy Registrar (Academic) and the Deputy Registrar (Administration).

With reference to the universities of Bath, Keele and Salford, the main contact with each institution, namely, the Planning Officer at Bath, the Deputy Registrar (Academic) at Keele, and the Public Relations officer at Salford provided information and clarified any problems on the telephone or by mail on a number of occasions.

9.3.4 Aston University

During most of the research period, January 1984 to March 1986, the writer was based mainly at Aston University. The opportunity was taken to discuss the changes at Aston both formally and informally with about twenty-five members of academic staff. These included four members who were resigning their post at the University.

The opportunity was taken to interview a number of senior administrative and academic staff. These included:

The Senior pro vice-chancellor
A pro-vice chancellor
The Assistant for Planning Vice-Chancellor's Office
The Administrative Assistant Vice-Chancellor's Office

The Senior Assistant Registrar
An Administrative Assistant Registry
The Chairman Academic Assembly
Dean of the Faculty of Management and Policy Sciences.

On three occasions discussions were held with groups of academic staff who were themselves involved in the changes which took place at Aston. Moreover some of the group members themselves were particularly interested in organizing these group discussions on the changes at Aston for research and related purpose.

The period at Aston gave the writer the opportunity to get the 'feeling' for the environment which is invaluable for understanding what goes on. The opportunity was also taken to attend a number of formal and informal staff meetings, for example, the Academic Assembly.

9.3.5 The University of Malta

The writer was employed by the Malta College of Arts Science and Technology (MCAST) from 1966 until 1978, and from 1978 by the University of Malta. As Head of the Business Studies Department at M.C.A.S.T., and then Chairman of the Faculty Board of Management Studies, Member of Senate and of Council, he was directly involved in the

changes which took place in Malta's higher education system in the late seventies. This experience provided ample opportunity for participant observation.

In the summer of 1984 a Questionnaire (see AppendixB) was sent to all members of academic staff. In the process of filling these questionnaires over fifty per cent of the staff were interviewed. Questionnaries were sent to all one hundred and four members of staff (excluding medicine & surgery). Ninty five questionnaires were returned duly filled. Twenty five questionnaires were also sent to the staff of the Faculty of Medicine and Surgery. Ten questionnaires were returned duly filled. Details and analyses of the results are discussed in the University of Malta case study Chapter 14.

9.4 Document Study and Analysis

Like all bureaucracies, universities record their life in documents of many kinds. Calendars, annual reports, special reports, planning documents, etc. Hundreds of pages were studied for this research. A great deal of the material found in these documents is included at various points in this study, and a great deal more has been used as background material.

Thus a number of methods were used in this study. These included - personal interviews, group interviews/ discussions, document studies and analyses, participant observation and questionnaires. The information from these methods is gathered together in this research. Figure 9.1 shows a list of the techniques used for each institution.

Figure 9.1

Research Techniques Used in the Case Studies

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ASTON	✓	J	V	✓ /	
BATH	√	V	V		
KEELE	/	· V	✓		
SALFORD	V	√	· /		
MALTA	✓	/	V	V	√.
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9.5 Approaches to Social Research

According to Bailey⁶, social researchers can reflect either the positivist approach or the observational approach. Survey researchers and experimentalists are generally regarded as being within the positivistic tradition. The experimentalists generally seek to establish causality, while the survey researchers look for correlates, if not causes. Most positivists tend to use quantitative techniques, including computer simulation, and techniques of data reduction, scaling and statistical analyses. They also tend to formulate rather rigorous hypotheses that are amenable to test.

Observational researchers tend to eschew rigorous hypotheses and quantification. They rely heavily on verbal analyses and are likely to be interested in a more subjective understanding of their subject. Most obervational and documentary research is unstructured and non quantitative. Bailey (1983)⁷.

Each of the above approaches has its strengths and weakness. Each approach has instances where it is definitely the method of choice. We felt that for our study the observational method was the most appropriate. Consequently that is the approach used in this research.

9.6 Additional Visits and Observations

Apart from the universities included in the study, a two day visit was made to Cranfield Institute of Technology in November 1985. Visits were made to the departments of Management and of Engineering. Cranfield has the reputation of being one of the leading British universities in both fields. Another interesting and perhaps unique aspect of Cranfield is that whilst most other higher educational institutions get about 70% of their revenue from public funds, Cranfield's income from this source is less than 20%.

In most universities, and certainly those included in our study, the trend is towards increasing the revenue from non-public funds. In view of this it was felt that it would be interesting to see how the Cranfield system works.

During August 1985 the writer attended the Sixth
International Conference on Higher Education at the University
of Lancaster.

One of the main themes of this Conference was 'The Management of Change in Higher Educational Institutions'. Attendance at the sessions on this topic were very useful, particularly in focusing attention on the challenges facing the universities and the various ways they were being tackled in different institutions. The informal meetings

with colleagues proved to be most beneficial for the sharing of particular institutional and national problems.

In April 1986, the writer attended the Aston/U.M.I.S.T. Fourth Labour Process Conference and together with H.D.R Miller presented a paper on 'Universities and the Labour Process - Some case studies from England and Malta'. This paper basically presented the findings of this study.

Aston University

Towards Survival, Stability and Excellence

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Chapter 10 .

Aston University

Towards Survival, Stability and Excellence

10.1 Introduction

Since the early eighties the University of Aston in Birmingham has moved to greater centralisation of management. According to one of its top academics a number of factors have contributed to this change, the most important being the personality and background of the then new vice-chancellor and the 1981 U.G.C. Cuts. Some time after the 1981 Cuts a member of the U.G.C. Committee told the same Aston academic,

"We (the U.G.C.) have done you a good turn, we have given you the opportunity to become a really effective university".

In this case study we will examine briefly the development of the University up to 1980 when the present V-C took over. After examining the background of the V-C we will look at the changes and

"restructuring that has occurred in the University, over the last five years in its academic programmes, staffing, students and physical facilities, which are probably more profound than anywhere else in the U.K. university system"2

and finally we will attempt to assess to what extent these changes are leading to the achievement of the University's aims and objectives which according to the Planning for the late 1980's document are to encourage excellence, innovative ideas and technological advance. Within these aims,

"Aston is committed to facilitating the active participation of all its members in the enterprise. The pursuit of excellence in all professional endeavours, and in the full development of its members constitutes the University's overriding objective, facilitated by equality of opportunity and freedom of expression. This commitment extends to all of its academic and related activities which embrace research, teaching and scholarship and the provision of extra-curricular facilities for promoting the wider aspects of educational process"

10.2 Historical Note

The University of Aston in Birmingham can trace a direct line of descent from the Birmingham and Midland Institute of 1875. It became a College of Advanced Technology in 1956 and was given University status ten years later as one of the new technological universities as proposed by the Robbins Report (1963)⁴.

The University expanded steadily through the 1970's always taking in slightly more students than the U.G.C. grant would justify. The staff/student ratio was thus

rather lower than in most other universities during this time. The University maintained links with the surrounding industrial and commercial world, and had a special emphasis on courses which included elements of industrial experience within them. At the end of the decade there were a total of 5,690 students. Of the 4,620 undergraduates, more than half (2,430) were on sandwich four year courses, where the third year was spent away from the university in industry and commerce.

In 1980 there were four Faculties of unequal size. Engineering had 2,390 students; Science 1,180; Management 790; and Social Sciences and Humanities 580. The remainder of the students were on inter disciplinary courses not attached to a single faculty. Approximately 17% of the student population came from overseas. At that time there were nearly 580 full time academic staff.

The University has had three vice-chancellors. The first Sir Peter Venables had been Principal of the College of Advanced Technology and had seen the university into its new status. Professor J. Pope presided over the expansion of the university from August 1969 to September 1979. Pope believed that Aston could become one of Britain's largest universities and his predominant policy was expansion and growth. Quantity rather than quality was the main emphases. He was an extremely adept financial administrator. During

his period Heads of Departments and Faculties exercised considerable power. Pope always agreed to have academic issues discussed and very often backed down under pressure from heads of departments. In spite of this, his approach was autocratic and during his era staff were already being conditioned to respond to this type of leadership. After a brief inter regnum in which Professor Parker acted as vice-chancellor, Professor Fredrick Crawford took office on 1st July 1980.

10.3 The Stanford Experience

Professor Crawford was a local Birmingham boy, who had worked for his first degree of engineering at the College of Advanced Technology, Birmingham, while being a research trainee in a local manufacturing company. He received a doctorate from Liverpool and briefly returned to the College of Advanced Technology as a senior lecturer. In 1959 he went on a sabbatical to the States where he remained until 1980.

His twentytwo years experience in the United States were at Stanford University, starting first as a Research Associate, and working his way up to become a Director of a research centre at that University. There seems little doubt that his experience of higher education in the States

particularly at Stanford, helped to structure his understanding of how universities did and should work.

According to Professor Crawford's Assistant for Planning it is the aim of the Vice-Chancellor to change the University of Aston into the Stanford of the U.K.⁷. In order to understand and appreciate better the main strategies pursued by Professor Crawford since he came to Aston one has to examine briefly what happened at Stanford University mainly during the period he was there.

The rise of Stanford University between 1955-1975 from a mediocre university to a campus of world eminence is one of the most dramatic success stories of American higher education.

"It is a fascinating story of daring, toughness (they moved an angry medical school - and killed a school of architecture), ingenuity, fund raising, great leadership (as late as 1967 Stanford had no faculty senate) a treasure hunt for good people, and brilliant strategy. The strategy had three prongs. The largest and the more central one was to recruit over several years 150 of America's finest minds for Stanford. The second prong was a sequenced emphases on those areas where Stanford had a comparative advantage (engineering and physics) next the social studies, then the humanities, stressing graduate work and professional schools. The third prong was a massive fund raising to provide facilities, and attractive campus to lure the talented scholars". Keller (1983)8.

The genius in the drive was Provost Fred Truman, the former dean of engineering, who not only inspired the setting

up 'Silicon Valley' and helped bring hundreds of millions of dollars in federal research grants to Stanford but also was a tenacious hunter and recruiter of outstanding people for his deans and faculty. When a new Professor was being considered, Truman made exhaustive investigations. He often visited the person's campus to examine his or her career and work on the spot. He urged departments to make lists of the ablest people in their fields and to get them interested in Stanford. When F. Truman became provost few members of the faculty had national reputations and none was member of the National Academy of Sciences. By 1980 there were 64 members of the Academy.

As we examine the academic strategy adopted by Professor Crawford at Aston since July1980, we can see the mark of his Stanford experience and his efforts to replicate the Stanford success story at Aston.

10.4 The 1981 U.G.C. Cuts

When Professor Crawford took his post in July 1980, it was already becoming clear that the University was facing serious financial problems. Professor Crawford started an information gathering exercise to revise the academic plan. In 1980, as Phase I of this academic plan revision, a lengthy questionnaire was sent to all members of the

academic staff to be completed and returned confidentially to him. There were two sets of questions, the first set related to personal activities in teaching, research and administration, and opinion sounding questions on a wide range of issues. The second set of questions invited comments on the strengths and weaknesses of the respondents own department, how it ranked with similar departments in other universities, how things could be improved, which activities of the department ought to be phased out or strengthened. It also asked for comments on which departments were thought to be the strongest and which the weakest within the university, and which activities the university ought to phase out and which to retain.

One could suggest that the Vice-Chancellor put forward the questionnaires as an exercise in democracy so that the academic plan would embody the views and aspirations of the greatest number of academics. The excercise was to be followed by analyses and comments from the Vice-Chancellor. Whether this was a genuine attempt to get academic staff involvement and participation as well as an information gathering exercise on which the vice-chancellor could base his future decisions - it is difficult to tell. What is certain is that events later that year (1980) forced the V-C to move fast.

As months passed, news of future cut backs in university

funding grew. In November the government announced that support for overseas students was to be withdrawn by the U.G.C. and universities had to charge the full 'economic' fee. As about 17% of Aston's 5.600 students were from overseas this brought real fears for the future. The announcement of a 3%% cut in university funding was also made in November. These events plus the fears of further cuts to come seemed to have forced the V-C to cut short the participatory process which he had started.

In January 1981 he set up the Advisory Group on Budget Adjustment (A.G.B.A.). It consisted of:

The Vice-Chancellor
Three Pro Vice-Chancellors
Four Deans of Faculty
The Staff Officer
The Finance Officer
The Estates and Buildings Officer
The Registrar
The Assistant for Planning

This group was to make short and medium range financial forecasts and suggestions as to how the University might balance its budget. In the setting up of this group it is now possible to see the process of power and decision making moving away from the official organisational committee

structure of the university and also the greater involvement of senior administrative staff in academic decision making 10. As we shall see in the other case studies, similar committees were set up at Salford soon after the 1981 U.G.C. Cuts, and at Keele when the new vice-chancellor was appointed in 1984.

The Advisory Group on Budget Adjustment published an interim report in April 1981. This report suggested that expenditure would need to be cut by 18-22 per cent by 1984, and this would mean 1,000 fewer students, 120-150 fewer academic staff and 240-300 fewer non academic staff unless new resources of funding could be found. As about three quarters of the University's recurrent expenditure goes on payment to staff any real savings could only come about by staff reductions. The majority of academic staff, however, hold tenured positions and Aston's charter was one of the most specific in this respect. Early in 1981 all staff vacancies were frozen. In April, the University Council introduced an Early Retirement Scheme for those aged 55 or above, which was financed from the University's own funds. In May, when the Universities still did not know what their funding for the coming academic year would be, Aston froze all undergraduate admissions.

Thus Aston was preparing contingency plans for various possible levels of funding. On 1st July 1981 the Cuts were announced whilst the Senate was in session, exactly one year

since Professor Crawford had set foot at Aston to take up his appointment. It fell on him to

"deliver the stunning news that the U.G.C. proposed to cut 31% of our grant over the period 1981/84, and 22% cut of our home population. The dire predictions of the Advisory Group Budget Adjustment in April, based on average cuts, had been far too optimistic". F. Crawford (1982)

Again the vice-chancellor initiated action. Meetings were held with Heads of Departments, Deans of Faculty, and other senior academics. Many of these meetings were with the Vice-Chancellor alone. None brought all the actors together as a group. The usual consultation and discussion processes were short circuited and a complete package of cuts was presented swiftly and directly to the Senate, a starting point, rather than a fully revised plan was presented and agreed by Senate.

After the announcement of the cuts the Advisory Group on Budget Adjustment gained even more prominence. It was in this committee that the more important issues were discussed and decided before being put to Senate and/or Council for formal approval. In September it reported that according to its calculation, the University's financial situation could only support approximately 350 academic staff by 1983/84, if additional income could not be found. Therefore up to 140 academic posts and 310 non academic posts would have to go in addition to posts already frozen.

The 'us' and 'them' division of the university became more polarized. Internal committees and groups within the University directed their attack on the Vice-Chancellor and a small group of administrators who they saw as acting against the best interests of staff and moving too quickly towards the possibility of compulsory redundancies. Thus, instead of the university working as a body to fight the cuts or to plan together the best ways in which to deal with the problems that it had been presented with, the situation rapidly polarised into a destructive internal battle between the Vice-Chancellor and a few senior academics and administrative staff and the rest of the academic staff. This is in marked contrast to what seems to have happened at Salford where the U.G.C. cuts were nearly 50% greater than Aston.

"It was pretty grim. People were disbelieving and desperately dissappointed We were angry, of course, but absolutely determined not to do what most people expected, which was to tear ourselves apart within fighting". Bosworth (1985)12.

At Aston

"Everything that was done, was done legally, within the constitutional framework of the university governance" said one senior academic, "Though there was a great deal of behind the scenes manouvering and pressures on certain people". 13

"The two years following the cuts must be remembered as a period of endless memoranda, planning documents and notices, and of endless union, Departmental, Faculty, Academic and Senate meetings. At the same time academic work became identified with and described by numbers of students, of 'A' level grades, of staff, of ratios, of contact hours, and mostly of pounds sterling. Questions of quality became submerged beneath the even dominant pressures of quantification". (Walford 1984)14.

Through a combination of various policies the University was able to reduce academic and non academic staff to the required level imposed by the cuts. What is even more significant is that this was done without any compulsory redundancies. It is interesting to remember that in October 1982, the Council by a postal ballot had narrowly agreed on compulsory redundancies and Aston looked as though it was going to be the stage where the policy of academic tenure would be broken.

"Though it might appear differently the University would have never used compulsory redundancies".15

said one senior academic.

10.5 Internal reorganisation and rationalisation

The reduction in the number of staff made closure and amalgamations of departments easier. A number of departments were amalgamated, for example, Production Technology and

Mechanical Engineering, Mathematics and Physics and a number of under graduate programmes were discontinued, for example Environmental and Occupational Health, Materials and Metallurgy. In July 1981 Aston had four faculties; these contained 21 departments, and the Management Centre (six divisions), one independent unit and one independant group. By the end of 1985, there remained only three faculties containing ten departments and the Management Centre (seven divisions), and no independent units or groups.

The whole undergraduate programme has been restructured and based on the modular system. The various faculties are now revising their graduate programmes. In defending these changes, Dr F Gick, who in 1983 was the Assistant for Planning in the Vice Chancellors Office, emphasized that they

"had nothing to do with finance, but were in fact linked to the university's strategy. In the short term to avoid future cuts, and in the long term, to make Aston the best technological university in the country. We believe we won't be cut, if we are on the course of being the best technological university" 16

Earlier in this case study we have mentioned the three pronged policy adopted by Stanford University which enabled it to become one of the most prestigious academic institutions in the world, that is, recruitment of top people, emphasis on areas of comparative advantage and massive fund raising.

To what extent have the changes introduced by Professor Crawford and his team and the challenge of the U.G.C. Cuts enabled Aston to become an 'elitist institution'?.

Before attempting to answer this question we must examine the main developments which took place at Aston since 1980. Table 10.1 shows a summary of the changes in a number of Key Indicators over the six year period.

We have already seen that during the time of the previous vice-chancellor the policy and emphases was on quantity. Recruitment was mainly in the hands of the heads of departments and there was a tendency to take more students than the U.G.C. grant would allow. The Mean 'A' level scores of Aston's students in 1980 were amongst the lowest in the country, being 1.5 points below the national average.

With the coming of Professor Crawford this policy was turned around completely. Quality not quantity was his objective for Aston. Student recruitment was taken away from heads of departments to the Planning Office of the Vice Chancellor. More stringent requirements were set up and adhered to. In 1985 Aston's mean 'A' Level Grades were 11.4 being 0.4 points above the national average. In spite of this the number of applicants putting Aston as 1st choice has increased every year.

TABLE 10.1

ASTON UNIVERSITY

SUMMARY OF KEY INDICATORS

	1980	1981	1982	1983	1984	1985
MEAN 'A' LEVEL SCORES UNIVERSITY ENTRANTS AVERAGE	7.4	8.9	4.6	10.4	11.2	11.4
FULL TIME STUDENT POPULATION	5,599	5,306	5,057	4,542	4,054	3,577
HIGHER DEGREES AWARDED AS A PERCENTAGE OF TOTAL	26.9	26.7	29.8	28.1	32.2	31.7
% OF STUDENTS UNEMPLOYED WITHIN SIR NONTHS OF GRADUATING	4.8	5.1	6.3	6.9	6.9	4.1
ACADEMIC STAFF WHOLLY UNIVERSITY FUNDED	543	533	487	410	344	278
STAFF STUDENT RATIO F.T. STAFF/F.T. STUDENTS	1:10.3	1:9.9	1:10.4	1:11	1:11.8	1:12.9
PUELICATIONS ATERAGE PER MEMBER OF STAFF	1.30	1.49	1.71	1.98	2.08	2.56
SECURAETT LICOME . EZC UGC GEAUT & HOME PEES) O OF TOTAL	20.1	23.3	24.5	24.3	24.7	26.0

The student population was cut by over a third, overseas students population fell by more than three quarters.

"At Aston overseas students are there to enrich the University academically and culturally, not to make up for cuts in recurrent grants" 17

This is in marked contrast with Keele where until recently the main way to fight the U.G.C. cuts was to increase the number of overseas students.

The employability rates of Aston's students have always been excellent. In 1985 it was one of the best in the country being second only to Cambridge. The number of academic staff has gone down by nearly 50%. Part of this fall is attributed to the fact that very few appointments have been made during this period and none were made on the professorial level.

"Aston's policy on staffing is that only staff of the highest calibre will be recruited, and that priority will be given to the needs of research groups. A substantial proportion of new staff will be on fixed-term contracts, and renewal of contracts, or conversion to continuing appointments, will be dependent upon outstanding performance" 18.

In spite of the financial pressure on the University to shed a number of staff in a short period, an attempt was made to rationalize this process to the benefit of the University. In 1982 Council decided to enact procedures which would result in every member of staff knowing whether

'an application to leave would be considered to be in the managerial interests'. These letters which came to be known as 'A' or 'B' letters had considerable effect.

"The object of the 'A' letter was to dissuade certain people from leaving - it worked very well as only two of the 'A' letter recipients actually left" 19.

One of the main criteria of a University's progress towards academic excellence is in the development of research. In the past six years Aston has made considerable progress in this area, particularly since the formation of the University Research Committee in 1983.

The University has sought vigorously to identify that which is best in its research programmes, and to ensure that the effort directed towards priority areas is well supported.

"Emphasis is on team effort. As a result the research programmes have become better focused, and are now coordinated in the activities of 30 research groups, a number of which are in areas of research new to Aston. Apart from the latter all of the groups have already established a good record in research; even the newer ones have members who themselves enjoy an established national or international reputation"²⁰.

Table 10.2 summarises the University's research record for the past five years

Table 10.2 University Annual Research Statistics: 1980-85

	AND PARTY OF THE P				
	1980-81	1981-82	1982-83	1983-84	1984-85
Pubin's	797	834	806	712	713
Value of Awards (£k) Res. Council Gov't Bodies Other	824 323 639	1483 641 782	637 709 736	1187- 625 1005	331 1181 1106
Total	1786	2906	2082	1917	2618
PhDs M.Phils	135 26	134 22	125 20	91 10	95 11

Source: Planning for the late 1980's.

The University's research performance over the past two years is mainly attributable to members of the academic staff who are still in post, and therefore represents a realistic profile. When expressed per member of academic staff, research funding and output have been rising appreciably (see Table 10.3) and can be expected to improve further rapidly as a result of new appointments, many of which it is envisaged will be made at professorial level.

Table 10.3

Summary of Research Per Member of Academic Staff 1980-85

	1980-81	1981-82	1982-83	1983-84	1984-85
Income (£k)	3.35	5.97	5.11	5•59	9.42
Publ'ins	1.49	1.71	1.98	2.08	2.56
PhDs	0.25	0.27	0.30	0.27	0.34

Source: Planning for the late 1980's

According to one senior academic, efforts to start recruitment of highly qualified staff had to wait until reorganization and rationalisation had taken place, and also until the U.G.C. Cuts were known in May 1986.

"There are a number of universities which have done hardly anything to reduce expenditure on staffing. In the next round of cuts they might have to reduce their staff by 20% or more, and that might be a good time for Aston to start in earnest its recruitment programme".

10.6 External Change and Developments

In its pursuit of excellence, Aston, through a number

of external developments, endeavours to interact strongly with industry commerce and the wider academic community. Perhaps the most important of these developments are the Aston Science Park, the Technology Transfer Company and the Extension Education programme through Tutored Video Instruction (TVI).

The Aston Science Park was created from a partnership of Birmingham City Council and Lloyds Bank each of which put up £1m to establish a 'venture capital fund' and the University itself. The Science Park is managed by Birmingham Technology. Its aim is to cause the creation of new companies seeking to take new technology ideas through development through commercialization.

Not only does the park offer the kind of facilities usually associated with well established business enterprises, conference rooms, telex services, audio visual aids, public relations and space - it also offers access to the venture capital fund, through which Birmingham Technology can take out an equity stake, and more important, to close and vital research and development support from the university and its staff.

The first Science Parks were established in the U.K. by Cambridge and Heriott Watt in the early seventies. The present rush to create science parks was initiated by Aston which seized the initiative and obtained funding for it.

In July 1985 a new company was set up for the express purpose of Technology Transfer. The company is a joint initiative between the then West Midlands County Council and Aston University, the primary object of which is to establish an organization capable of effecting the transfer of technological progress, in terms of both products and processes from research work undertaken in academic institutions, particularly Aston University, and other agencies such as research divisions of large companies into local manufacturing industry and encouraging the investment necessary for its assimilation.

In operational terms it will mean that the company will have the facility to act as a broker between buyers and sellers of new technology. Where Aston is not able to help a client the company will endeavour, through its contacts and data base, to put the client into contact with the relevant organisation to pursue its enquiry further.

Opportunities for education should be available throughout life, for career purposes and for greater personal fulfilment - the need increases with the pace of technological change. The Government agrees with the U.G.C. and the N.A.B. that the provision of continuing education should be one of the principal parts of higher education work. Aston has always been one of the leading centres of post experience education. In June 1984 the Centre for Extension

Education was opened. The heart of this project is
Tutored Video Instruction (TVI). The TVI was first used
by Stanford University where it has proved its worth. Now
it has been brought to Britain for the first time through
Aston.

In order to boost Aston's image and public relations the firm Image Consultants was brought in to devise a totally new image for Aston. It is hoped that the internal and external developments which have taken place at Aston plus this public relations exercise will bring about an accurate projection of Aston's new image. This is not going to be easy. According to Professor Crawford

"Old prejudices die hard in the outside world, and we are certainly not in a privileged place among Britain's universities as a result of our past performance: it is potential for future performance that must be made to count by honest, accurate projection of our image. We cannot allow ourselves one moment of complacency". 23

10.7 Conclusions

If one has to summarise in one phrase the various strategies and policies adopted at Aston since 1980 that phrase would be 'purposeful development' - Aston knows precisely where it is going. Some might say that the vice-chancellor knows where he wants to take it. The sacrifices of the past years were not merely for survival

but the strategies and plans were also designed to raise Aston's performance in quality and achievement.

There are some academics who feel that the gains made in the past few years were done at too great a social cost and scars have been left on the Aston community which will take many years to heal.

They feel that there will not be too much enthusiasm and commitment from academic staff unless Professor Crawford changes his style of leadership.

"He (Professor Crawford) keeps saying he will decentralize but has done nothing about it"

said one leading academic. Another academic argued that

"since it is unlikely that Professor Crawford would change his style, now that he has put Aston on the right track, it might be a good time for a change in leadership".

This proposition did not seem to have much support amongst the various people who were interviewed. The majority were of the opinion that, in spite of any reservations they might have about the Vice-Chancellor's style of leadership, it would be highly unlikely that Aston could find someone with the determination, qualities and experience of Professor Crawford to lead it, especially with impending cuts in university funding and the increasing demands being

made on Universities.

Various instances could be mentioned when the participation and involvement of academic staff was actively sought. Professor Crawford certainly professes that staff participation takes place at Aston. On the University's response to the Swinnerton Dyer Questionnaire he said,

"The preparation of the document was a mammoth task, involving nearly 2,000 man hours of discussion. I doubt whether any university in the country registered a higher degree of participation in the preparation of its response. Nearly half of Aston's academic staff were very actively involved. The University can be justifably proud of the result"24.

In a recent interview with the Birmingham Sun^{25} Professor Crawford stated his views on centralised control and staff involvement,

"No, I don't think that more and more decisions are becoming centrally controlled. I think that in periods of crises, institutions tend to centralise their decision making somewhat more than is normal, but the process at the moment is being reversed as soon as we can and I would like to see a lot of decision making dispersed through departments, faculties and the various committees of the University. I'd like to see that because it is only when people have a personal stake and a personal involvement that they identify with the decisions that are actually made and have the commitment to carry them out with real enthusiasm".

In spite of these and similar statements made by the Vice-Chancellor there are still those who feel that

"at Aston there are few indications of any moving back to a traditional British style of authority distribution. On many important issues we see the administration initiating decision making processes in areas which are related to academic work. Further, Council has now taken on a role which has become very close to a Board of Trustees which largely acts to maintain the managerial interest as defined by the administration. Small groups of senior academics now make major decisions which although initially are only 'recommendations', are usually accepted by Faculty Boards, Senate and the various committees" 26. H. Miller and G. Walford (1985).

Our study seems to indicate that the most important single factor contributing to the changes which have taken place at Aston in the past few years is the coming of the new Vice-Chancellor. After twenty two years experiencing the Stanford success story, he came to Aston with the objective, backed by a carefully planned strategy, of making Aston an academic institution of world eminence.

It is a matter of conjecture how far the 31% U.G.C. cuts abetted Professor Crawford in the implementation of his plans. What seems certain is that the enormity of the cuts and the short time in which the University has had to adjust to them significantly reduced any united opposition to his plans and to his style of leadership. How far has he succeeded in replicating the Stanford success story at Aston? We believe that the various changes which we have analysed indicate that Aston has started on the road of being a leading technological university. In the past two years we have had a number of public acknowledgements of

Aston's success. The U.C.C. in recognition of the exceptional success with which the University coped with the problems created by the 1981 Cuts increased its recurrent grant by £250,000 for 1985/86. Earlier it provided Aston with over £1m for buying up non university property on campus to move in off-site departments. A leader in the THES (27.9.85) states that 'Aston and Salford.... have now been firmly designated as success stories'.

Sir Edward Parkes who was Chairman of the U.G.C. when the cuts were allocated wrote in The Times 27

"It so happened that about the time of the cuts, Aston and Salford both acquired new and able vice-chancellors. Partly as a result of the cuts themselves (which enabled them to dispose of their more antiquated assets) and partly as a result of vigorous direction, both universities have dynamic departments and both seem to me to have a bright future".

An article in The Guardian 28 stated

"Today it (Aston) is slimmer, more highly focused and academically of better quality than before. In its academic policy it links with industry and its decision to bring experts to change its identity, Aston claims to be breaking new ground in U.K. higher education".

The list of eulogies on Aston's achievement is quite impressive but we feel that its future success would be more secure if concerted efforts were made for greater understanding between the leadership and the academic staff.

It is true to say that Aston had its fair share of upheavels and conflicts in the last six years, perhaps more than any other British University. Certainly more than our other case studies. In his book, 'Men who Manage', Melville Dalton²⁹ wrote.

"Conflict is typical... Perpetual harmony is alien to life. Conflict and harmony are usually intermingled in all advances, especially in democracies, and numerous other experts on organizational change concur".

Chris Argyris, for example, says that,

"academic executives must couple their advocacy with an invitation to others to confront one's views, to alter them, in order to produce the position that is based on the most complete and valid information possible and to which people involved can be internally committed".

To encourage participation in policy formulation, the academic leaders need to have a high tolerance for argument and controversy. If the emphasis is clearly placed on facts, important concerns, ideas, honest doubts, and imaginative initiatives and not on personalities, everyone gradually realizes that the institution's strategy and welfare is the issue, not each other's reputation.

According to Argyris³¹, and as we hope is clearly shown in our case studies,

"The probabilities of implanting educational processes that threaten the status quo are always low and disheartening but the chances are increased if, in trying to change a university strategy, the president, (vice-chancellor or rector) recognizes that he needs to change the attitudes of its main actors".

We believe that this process has started at Aston.

The University of Eath

A Study of Academic Management Strategy

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Chapter 11

The University of Bath A Study of Academic Management Strategy

11.1 Introduction

The Bristol College of Science and Technology and the Newcastle Polytechnic were the last two institutions which were designated as Colleges of Advanced Technology in 1960. In 1966 the Bristol College was granted a Charter and it became the Bath University of Technology, the last of the series of Colleges of Advanced Technology which became universities during the sixties 1.

A number of important characteristics 2 distinguish the University of Bath from the other CATS which were designated as Universities.

In the first place the University of Bath was the smallest of these institutions. It was also the youngest, being designated a CAT in 1960. The search for a suitable site proved quite difficult. But in 1964, the Bath City Council offered a site on Claverton Down, which was readily accepted by the College governors after other sites were considered. With this the College had found a permanent

home. The decision to leave Bristol and to start as a University on an entirely new site in a purpose built building was a most important landmark in the development of the University.

Another important distinction between Bath and the other ex CATS was that as Bath was relatively younger and smaller, it had and took the opportunity to import a lot of new blood into the system, especially as heads of departments. Thus whereas in the other ex CATS it was mainly the same academic staff which served in the newly formed universities, Bath took the opportunity to import new and better qualified staff as it expanded. As one of the leading founders of the University of Bath explains, 'Wewere growing, changing, and moving'4.

The third important and perhaps unique characterestic of the University of Bath was the organisational framework which was developed from the formation of the University. As we believe that this is perhaps the most important single factor which contributed to Bath's success, especially in its relative flexibility and adaptability to change, we shall discuss these organizational arrangements in some detail.

The University of Bath does not have a detailed statement of Aims and Objectives, as does, for example the University of Salford. Yet, according to its Planning
Officer, Dr B. Taylor⁵, its major objectives can be understood
by all and can be summarised as follows.

- 1. to strive for excellence in the training of undergraduates and postgraduates;
- 2. to maintain close contact with industry and commerce;
- 3. to excel in research;
- 4. to recruit the best qualified entrants commensurately with the most efficient use of its resources both physical and financial;
- 5. to contribute to the community;
- 6. to maximize the employability of its products.

In this short case study of the University of Bath, having looked briefly at the objectives, we will examine in some detail, what policies, plans and organizational framework were adopted in order to achieve these objectives, and how successful these policies have been.

11.2 The Structure of University Management

The Development Plan for the University of Bath made a number of provisions for the organizational framework of the University. These proposals were based on a number of assumptions.

 Since a university is such a complex organisation, a formal structure with precisely defined roles and integrated activities would facilitate administrative control but such control would not necessarily lead to greater efficiency and could easily stifle initiative and innovation at lower levels.

- 2. Membership of legislative bodies within university structure would be by election or rotation, so that teaching and research staff can participate in the formulation of policy.
- 3. A strong, professional administration would have to be developed so that senior academic staff would not be over burdened with routine administration.
- 4. Many members of staff still feel little sense of involvement in the policy forming process of the University, despite extensive use of committees.

These assumptions provided the basis upon which the future organisation structure of the university was to be made. The assumptions themselves presented problems, which the new university organisation had not only to remedy but, in doing so, provide a flexible and responsive structure of government which a modern university needs.

The plan proposed the following; 7

- a) The number and levels of committees to be reduced. This would give a clearer distribution of responsibility and a more direct relationship between one level of decision making and another.
- b) A wide range of participation and involvement was sought at all levels.
- c) Academic committees were encouraged to obtain outside help on both teaching and research matters.
- d) The formal academic structure was to be simple. The avoidance of faculty grouping was to give a flexible relationship between individual Schools of Study and a clear distribution of responsibility between Boards of Studies and Senate.

While the structure of the University has changed in the past twenty years, the present structure certainly reflects the original plan, especially the avoidance of faculty grouping. Though essentially Bath followed historical precedents (Court, Council and Senate) the structure adopted represents a much tighter system, than that of most other universities.

The original plans of the university did not contemplate that there be Areas in the University, but the basic academic units in it were to be Schools of Study. As the University grew and student numbers expanded the need for a more coordinated effort in resource allocation required a new arrangement. In 1969, Rottheram was appointed as Bath's second vice-chancellor. He had an industrial background and he wanted 'Area Managers' reporting to him and appointed as Administrators with Area Secretaries as their helpers. Areas differ in nature and scope from the traditional faculty structures in that the whole spectrum of University activity is divided into appropriate grouping where:

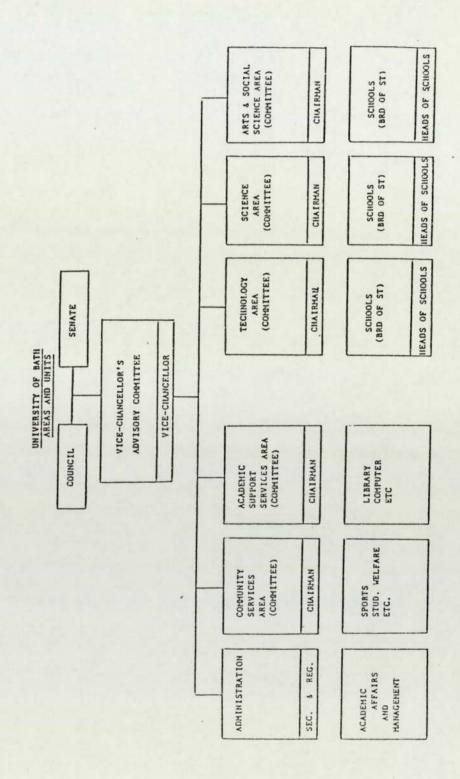
- a) the academic units (the Schools) are grouped into three Areas: the first area representing the technologies, the second the sciences, and the third covering arts and social sciences.
- b) the social policy of the University is coordinated within the Community Services Area and broadly covers such activities as sports, amenities, arts, student welfare, etc.

c) the library, the computer centre and other services which are central to the academic work of the university were designated to the Academic Support Service Area.

Within the University of Bath there are therefore five designated Areas as shown in Figure 11.1. Unlike the traditional faculty, the Areas at Bath concentrate on resource allocation only. As such, their relationship is more pronounced with the Vice-Chancellor's Advisory Committee (VCAC) which reports to both Council and Senate.

Area Committees are concerned with the study of resource needs within each area and with making recommendations to Senate and Council. These committees are fully involved in the operation of planning framework of the university especially with regard to financial and staff budgets. Their main terms of reference are to consider the resource needs of each area as put forward by each Head of School and proposed by his Eoard of Studies. The Finance, Personnel and Planning Office reconcile the demand with the existing resources and propose the best compromise. The area committee consider the extent to which these proposals meet the needs of the Schools in the area and how policies laid down by Senate can be met. Any needed adjustments are reported to VCAC for ultimate report to Senate and Council.

The Schools are the main academic units in the University, and their main responsibility is to organise and administer teaching and research activities in their fields.



Source: Administration Document

Though each School takes general responsibility for a particular field or discipline none is academically self contained, so all students receive instruction from schools other than their own.

Thus the academic work of the University is centred around the Schools of Studies. This work is coordinated through the Board of Studies which report, advise and make recommendations to the Senate on all academic matters.

It has already been mentioned that a strong professional administration was needed to relieve senior academic staff from routine administration. To achieve this, the university has extended administrative assistance not only to Schools but to Areas as well.

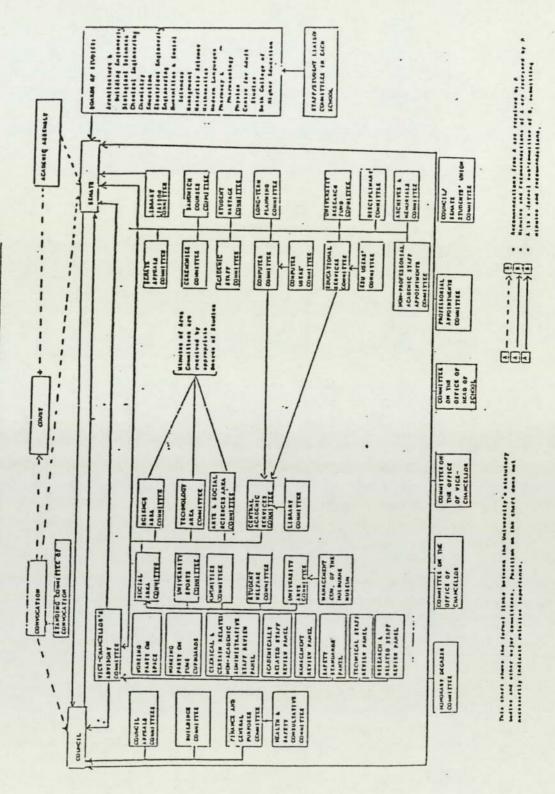
The administrative assistance for the work of Area committees is provided by the Secretary, who is also the Registrar, through a wide range of professional officers. Apart from providing administrative support to the Area Chairman and being Secretaries of the Area Committees, some of their functions may include: providing assistance to Heads of Schools, especially in the management and control of resources, making known the needs of Areas before allocation of resources, assessing staff work required for allocation of resources to individual Schools and budget formulation and supervising the use and control of resources and the control of expenditure in the Areas.

According to the Administration Paper they are responsible for the planning function at Area Level. The continued strenghtening of the University's administrative function is evident through the provision for School Administrative Assistants who are normally located within the Schools and undertake a wide range of functions and are responsible to the Heads of Schools in assisting the Heads to fulfil their statutory duties.

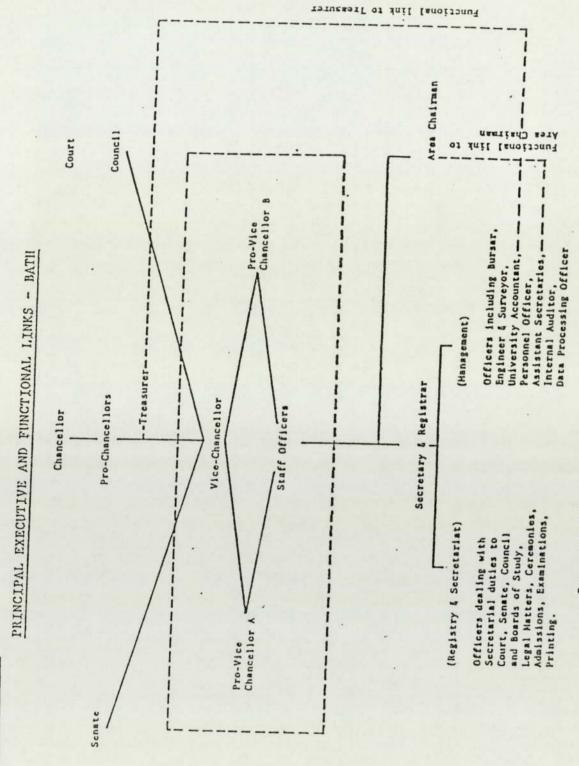
A detailed view of the committee structure at the University of Bath is shown in Figure 11.2. The committees are grouped in such a way as to represent the formal links between the university statutory bodies and other committees, and to represent the general functions of the Council, and the business activities of the Senate.

The duties of the Vice Chancellor are listed in Section 5 of the University Statutes 9. Besides being the Chief Executive of the University, he is Chairman of the Senate, and a member of the Court, Council, the Board of Studies, and of all the committees and joint committees of bodies. He has a general responsibility to the Council for maintaining and promoting the efficiency and good of the University. Thus he is in a position of overall authority and responsibility for the academic and non-academic affairs of the university. Figure 11.3 illustrates the principal executive and functional links in the management of the

University of Bath - Committee Structure



Source: Administration Document

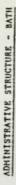


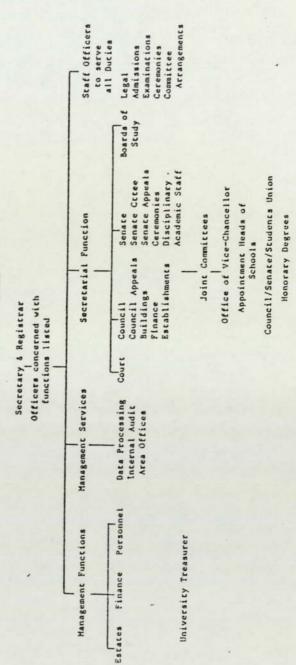
Source: Administration Document

University of Bath. Figure 11.4 gives a more detailed breakdown of the administrative structure.

Another prominent feature of Bath's administrative structure has been the introduction of the Vice Chancellor Advisory Committee (VCAC usually referrred to as the 'inner cabinet') consisting of the pro V-Cs, the Area Chairman, the Secretary and the Registrar. Its main function is to advise the V-C. The creation of the VCAC means that for planning purposes it provides a coordinating function and serves a useful role in relating area needs to overall university policy and objectives, and available resources, and through its consideration of matters of policy communicated to it by the U.G.C., it is able to foresee what the overall University position would be in the future. The VCAC also provides a useful medium of communication of possible changes on policy to the areas, and provides vehicle to Council and Senate especially in conveying to these bodies the needs and aspirations of the areas. Similar types of committees were set up at Salford and Aston in 1981, and at Keele in 1984.

The introduction of the Area Committees in the early 1970's and the VCAC is the only fundamental change in the management of the university. The policy making function of the Council and of the Senate is in no way impeded, the intention being to lessen the burden of these two bodies,





Source: Administration Document

which will receive recommendation where appropriate.

This brief description of the organizational framework of the university of Bath shows the pattern of formal involvement of academic and non academic staff in University management. How real and effective is their participation, is more difficult to assess. Coordination is effected through the role of Administration in attempting to ensure that procedures and effective management practices are followed. The overall balance between teaching and research is exercised by the Senate through its various committees.

The organisation at Bath indicates that University management and strategy can be conceptualised as an integrated and continuous process. The overall planning framework is based on and reflects the assumptions and requirements of the Schools and is therefore meshed into a pattern. In particular, the planning process devised and the organisational structure which has evolved provide the right type of framework for flexibility, change and adaptation which may be deemed appropriate to a modern university.

Having examined in some detail the organization framework of the University of Bath we will now look at the main developments of the last few years.

11.3 Developments during the 1970's

During the early seventies, like most other universities, the University of Bath expanded its student population and in this process of rapid expansion it competed for quantity with other institutions of higher education.

In 1972 the post of a Planning Officer, reporting directly to the V-C, was created. This was probably the first such post in a British University. The person invited to fill this post was specifically requested to 'sit and think' and to provide the Management of the University with the relevant information and statistics on which to base its decisions.

In 1976 the Planning Officer formed part of a Working Party set up by the Conference of University Administrators to explore the future of higher education. His forecasts of University populations (Taylor 1977¹⁰, 1978¹¹,) have proved to be very close to reality.

Through a series of discussions and lectures the staff of the University of Bath were acquainted with the sombre future facing higher education, the probable limitations to their own promotion ambitions, the loss of vitality threatened by inability to recruit young academics, the likely decline in resources... and so on. One effect of this was the acceptance of a more rigorous stance by the senior academics

and administrators.

"This has undoubtedly given us an advantage in the arrangements of our affairs and the more ready acceptance of unpalatable decisions. It is apparent that the stark reality of the situation is not fully appreciated at grass roots level". Taylor (1982)

It was also as a result of the forecasts and information provided by the Planning Officer that the University of Bath made a major strategic decision, namely, that in the future the University should build on quality and not on quantity.

In 1976, when the full time under graduate population had reached just over 3000 students a deliberate policy of limiting undergraduate numbers was introduced and this figure has been deliberately held constant for nearly ten years, implying an annual intake of about 900 students. The proportion of these students taking the 'sandwich' option for their honours degree has been maintained at about 63 per cent.

This limitation meant that the quality of the applicants as judged by 'A' level grades went up every year. In fact by 1981 when the U.G.C. cuts were announced, Bath was among the universities with the highest average 'A' level grades in the country. It has been suggested 13 that this was one of the reasons why Bath was not so hard hit by the U.G.C.

If the percentage cut from the universities grants is considered overall against the average 'A' level grades, the four universities that were worst cut Salford, Keele, Aston and Bradford had some of the lowest average 'A' Level grades in the country. Whilst the universities with highest 'A' level grades York, Bath, Durham, Oxford, Cambridge and Bristol were hardly affected by the cuts.

entry, postgraduate numbers were slowly but steadily increased. A policy was adopted to recruit more research oriented professors and money from industry was used to build up research '14. Research was to be the main drive of the university's development. The number of learned publications and the number of full time students registered for higher degrees by research, and the value of research contracts in real terms all doubled between 1976 and 1980. In 1980 nearly 11% of student population was registered for research degrees. Nearly 13% of recurrent expenditure in 1980 was supported by funds from research grants and contracts. These figures compared favourably with the national average 15.

In order to stimulate research a proportion of recurrent income is taken from the top of the budget so as to provide pump priming funds and personnel in support of innovation.

In 1969 South Western Industrial Research Limited (SWIRL),

a research and development company, was set up under the umbrella of the university. It operates as a commercial concern, and it enables industry to take advantage of the university's expertise and equipment and provides an opportunity to university staff to keep abreast with the latest developments in industry. It also provides a modest extra payment to participating faculty members, besides a healthy commercial profit which again is devoted to support the research programme. Budgetary allocation are heavily weighted in favour of Schools with a higher than average proportion of research students.

Each year the Schools receive a tabulation of all similar departments placed in rank order according to their proportion of research FTEs. A head of School can see where he is in the 'pecking order' and so can everyone else in the university. Table 11.1 shows the rank order of universities offering Management Studies. Not all universities offer the subject but, of those who do, Bath is in a very strong position. This is a typical 'carrots and sticks' exercise. The carrots are provided by praise and additional funds—the sticks are self administered by a School of study being ashamed of its position of inferiority relative to its peers. This policy has worked well as can be seen from figures which illustrate Bath's research performance in terms of revenue and students numbers.

TABLE 11.1

BUSINESS MANAGEMENT STUDIES 1982 83

SETIH	_ UNIVERSITY		*RESEARCH	TOTAL FTES
1	Brune 1		25.3	170
2	Bath	1	24.3	387
3	Oxford		19.2	52
4	L.G.S.B.S ·		17.2	239
5	London		13.4	411
6	U.M.I.S.T		12.7	834
	M.B.S		11.2	258
8	Cardiff		8.6	105
9	Glasgow		8.4	107
10	Warwick		7.9	303
11	Lancaster		7.5	481
GREAT	BRITAIN		AUERAGE 6.4	8.621
12	Bradford		6.1	512
13	UWIST '		5.9	204
14	Stirling		5.3	151
15	City		4.8	461
16	Kent		4.7	64
17	Strathclyde .		3.3	778
18	Aston		3.0	904
19	Loughborough		2.7	444
20	Edindurgh		2.7	373
21	Sheffield		1.9	466
22	Salford		1.7	287
23	Durham		1.6	63
24	Hu ! 1		1.2	86
25	Heriot-Watt		1.1	276
26	Leeds	-	1.0	295

Source: University Statistics-Vol.3-FINANCE-UGC June 25th 1984 Average excludes London. Oxford, Cambridge and the Business Schools

B. J.R. Taylor - University of Bath.

One of the results of limiting undergraduate admissions was a steady rise in the quality of students. It is claimed that

"It did not take employers very long to discover the superiority of our students. All of our courses are strictly vocationally orientated and it is no accident that if U.K. Universities are listed in rank order of the employability of their graduates, Bath tops the list. This leads to newspaper headlines like IF YOU WANT TO GET A JOB GO TO BATH UNIVERSITY. This has the effect of boosting our numbers of applicants, we can be more discriminating and admit better students... and so on. It is a very advantageous form of positive feedback".

Another area in which the University of Bath has made considerable progress is in the control of expenditure. Over the years various techniques have been introduced to ensure the most effective use of resources both human and physical. The accounts of an organisation can be balanced either by increasing revenue or reducing expenditure, or a combination of both. Until recently, the control of expenditure, except perhaps in the case of energy costs, seems to have been relatively neglected by the universities. On the other hand, at Bath, close attention has been given for many years to the allocation and control of resources. Each year more then 15,000 bits of information about U.K. universities are gathered by the Planning Officer from a variety of sources and the computer is programmed to give a detailed print out of 158 different expenditure headings annually for the University, calculated by regression

analysis to allow for size. It also gives a statistical comparison assessing the probability of a significant difference from the peer populations. Similar outputs and tables are available for every British University. Taking into consideration its mixture of students, Bath prides itself that its unit costs are lower than those of any other U.K. university. Table 11.2 shows the relationship between the University of Bath expenditure and the Great Britain average for its mixture of students for the 1979-80 session.

The various steps taken over the years, especially since the mid-seventies have paid off, and by 1980, the various performance indicators showed that both in academic excellence and in economic relevance the University of Bath was one of the leading universities in the country. This was in spite of the fact that Bath received the lowest per capital grant of the Technological Universities.

11.4 The 1981 UGC Cuts

When the U.G.C. visited Bath in 1980 it was able to judge for it self the progress that had taken place, especially since its previous visit in 1974. It could easily see that Bath's performance had climbed upwards, in terms of student entry quality, research perfomance, employability of its products, and the economical operations of the university. What more could the U.G.C demand? In

	Expenditure category	Ed. Technology	Consumables	Gen. Ed. Expend.	Library	Acad. Sals.	Administration	Computer	Amenities & Fac.	Ord. Repairs	Support Sals.	Clean, & Cust,	Power & Phones	Misc. Prems.	Miscellaneous	Totals	December 17th 1981
3788	Actual as I of 68	127.22	120.15	95.73	93.83	91.61	89.39	86.28	83.79	77.56	75.39	72.46	71.09	52.13	28.87	86.13	December 17th 1
load:	Cumulative GB 1	1.33	8.67	11.34	16.15	54.45	61.37	63.73	86.04	71.60	83.27	87.50	92.81	97.99	100.00	100.00	ò
Total FTE load:	68 av. as X of GB total	1.33	4.96	2.68	4.80	38.31	2. 92	2.36	2,31	5.56	11.67	4.23	5.31	5,18	2.01	100.00	
+	Actual as X Univ. total	1.96	6.92	2.97	5.23	40.74	7.18	2.36	2.24	5.01	10.22	3,56	4.38	3,14	0.67	100.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ВАТН	Difference	44,709	123,639	-14,124	-36,628	-397,296	-90,731	-40,020	-46,256	-154,354	-355,351	-144,278	-189,867	-306,743	-176,479	-1,715,360	Univ. of Bath, U.K.
	68 average expend.	164,267	613,723	330,911	594,080	4,738,010	855,544	291,651	285,371	687,707	1,443,935	523,793	656,670	640,775	248,104	10,653,494 12,368,854 -1,715,360	V. of B
Sity:	Actual expend.	362,732	737,362	316,787	557,452	4,340,714	764,813	251,631	239,115	533,353	1,088,584	379,515	466,803	334,032	71,625	10,653,494	lor, Uni
Universi 1979-80 Session	Expenditure category	Ed. Technology Cap. from income	Consumables	Gen. Ed. Expend.	Library	Acad. Sals.	Administration	Computer	Amenities & Fac.	Ord. Repairs	Support Sals.	Clean. & Cust.	Power & Phones	Misc. Prems.	Miscellaneous	Totals	B. J. R. Taylor,

Source: USC Form 3 outturn.

N.B. Expenditure is net of self-balancing items - e.g. research & contract income.

its deliberations with the U.G.C. the University of Bath could argue that the strategy and policies adopted have led to an overall increase in performance and effectiveness. Any serious cuts in U.G.C funding would seriously jeopardize what the U.G.C. itself had helped to promote.

How far this type of argument influenced the U.G.C. is a matter of conjecture. What is certain is that when the July 1981 cuts were announced the University of Bath was one of the least affected, its cut of 2.1% was the second lowest in the whole university system. The only other university which suffered a lower cut was York, with a 1.7% U.G.C. cut. In its headlines 'The U.G.C. protects the chosen few' 18 THES stated that

"ten out of the fortyfive universities were protected by the U.G.C.'s selectivity strategy for the 1980's from the full rigour of cuts in public expenditure. Though eight of these ten were obvious choices, Bath and York have done surprisingly well".

Whilst among the technological universities Bath did exceptionally well, being least hit, followed closely by Loughborough. This is in sharp contrast with our other case studies, Aston with 31% cuts, Keele with 32% cuts and Salford 43%, whilst other universities were being asked to make cuts and reductions in students and staff, in some cases amounting to 30% or more. For Bath the U.G.C. recommended the maintenance of student numbers in arts,

languages in particular, and a small increase in business management studies. It recommended an increase in physical science, a substantial increase in specialists in mathematical science, and a decrease in pharmacy. The UGC also suggested that Bath should discuss with Bristol the possibility of cooperation in architecture. Since then the architecture department in Bristol has closed down.

The UGC's letter to Bath is considered as justice done for the lack of financial support it had had in the past, but more especially as a reward for heeding to previous UGC advice, and for its long term strategy of emphasizing quality rather than quantity, in this way building up its academic excellence and research.

Commenting on the relatively favourable treatment meted to Bath by the UGC, the V-C Professor P.T. Matthews 18 stated that this was evidently a recognition by the U.G.C. of the very high quality of student entry, the high level of research and, most important the extreme cost effectiveness of Bath's financing. For many years Bath had been operating at a per capita level of support which had been at least fifteen per cent below the national average for the predominantly laboratory based mix of activities on which it concentrates. At 1981 prices this was the equivalent to saving between £400 and £500 per student per annum. With such an excellent record of cost effectiveness, it is not surprising that Bath was treated less harshly and was one

of the 'chosen few'.

In an interview with the Times Higher Educational Supplement Professor Quayle the new vice-chancellor stated

"I think in 1981 the University Grants Committee realized that they had to take our cost effectiveness into account. We were operating at about 86 per cent of the unit cost for a university of our kind of mix and the level of activity. In the 1970's the figure was about 70 per cent. Our closeness and involvement with industry and commerce gave us the feeling that efficient management of resources is of prime importance to a university as well".

The other criteria he thinks were taken into account, which left Bath virtually unscathed, with an insignificant cut, were quality of intake, judged by 'A' Levels, and the ability to attract outside research funds.

Writing in the Times²⁰, Sir Edward Parkes who was Chairman of the U.G.C. during the 1981, stated that he wanted

"to dispel the myth of anti technology attitude of the U.G.C. In fact the U.G.C. strove to retain or even to increase the grant to technology. The U.G.C. Technology sub committee was insistent, that the hard won money (from the Treasury) must be used to support those departments at the forefront of modern engineering and that it should be augmented by taking away money from the moribund and out of date departments. The result was that the leading technological universities Bath and Loughborough gained, and those which failed to keep up with modern technology, Aston and Salford lost."

11.5 Post 1981

The history of the University of Bath since the 1981 cuts is certainly different from that of our other case studies. Whilst Aston, Keele and Salford had to formulate and implement fundamental changes to meet the devastating cut in grants, Bath encouraged and elated by its relative success and perhaps a bit complacent continued more or less on the same lines as before.

The student population was slightly increased, mainly as a result of the U.G.C. recommendations. At the same time emphasis on quality and research continued as can be seen from the increase in the percentage of higher degrees. awarded which rose from 17.7% in 1980 to nearly 24% in 1985.

Another indicator of research and academic emphasis is the number of staff publications which rose from 1.60 average per member of staff in 1980 to 2.11 in 1985. Since the cuts imposed on Bath were relatively light it was not forced to lose any of its staff and over the last five years the number of academic staff has remained relatively stable. Although the cuts were not so severe the University still strove to increase its income from research and other non UGC sources. The proportion of this income rose from just under 21% in 1980 to 28.4 in 1985. Table 11.3 shows a

TABLE 11.3

UNIVERSITY OF BATH

SUMMARY OF KEY PERFOMANCE INDICATORS

	1980	1981	1982	1983	1984	1985
MEAN 'A' LEVEL SCORES UNIVERSITY ENTRANTS AVERAGE	11.0	11.1	11.6	11.9	12.5	12.8
FULL TIME STUDENT POPULATION	3,487	3,581	3,608	3,581	3,717	3,681
HIGHER DEGREES AWARDED AS A PERCENTAGE OF TOTAL	17.7	21.3	23.2	22.6	24.7	23.7
% OF STUDENTS UNETPLOYED WITHIN SIX MONTHS OF GRADUATING	3.1	3.3	9.6	10.9	11.5	0.9
ACADEVIC STAFF WHOLLY UNIVERSITY FUNDED	374	372	360	363	368	365
STAFF STUDENT RATIO F.T. STAFF/F.T. STUDENTS	1:9.3	1:9.6	1:10	1:9.9	1:10.1	1:10.1
PUELICATIONS AVERAGE PER NEWBER OF STAFF	1.60	1.78	1.83	2,12	2.1	2.11
RECUBERT INCOME (EXC UGC GRANT & HOME FEES) % OF COTAL	21%	24.5%	792	25.7%	26.6%	28.4%

summary of changes in a number of performance indicators for the period 1979-80 to 1983-84.

As can be seen from the same Table the quality of university applicants has continued to improve. In 1985 the average score for all Schools was 12.8, in fact in some Schools, e.g. Electrical Engineering it was 14 points or more. It seems that a point has been reached where it would be difficult to sustain the high intake quality. Progressively it has become difficult to get admission to Bath, and more career advisors in schools are recommending to their students to apply to other universities, because they will have a better chance of admission - to apply to Bath would waste an opportunity 21 because students can only apply to four universities. In the beginning of the 1985/86 there were a number of Schools which were undersubscribed. With greater competition among universities to attract a decreasing number of students the problem is likely to become more acute.

The University of Bath has thus continued on the strategy mapped earlier in its foundation: An effective and efficient management and committee structure, which, whilst enabling bottom-up decisions and staff involvement, facilitates the process of decision making and its implementation; and a professional administration team which has provided the academic function with excellent back up services in their quest for academic excellence. With its

cost effectiveness approach and techniques it has enabled the University to become cost effective to a degree that in most areas its costs are lower than the average for those of British Universities. Finally with its declared policy of concentrating on quality rather than quantity it was able to build a reputation not only of academic excellence, but also of economic relevance, especially in view of the sandwich courses attended by two thirds of its undergraduates and the high employability of its graduates.

In spite of the success and progress achieved by Bath University, there has been growing, since 1981, a feeling of unease that a certain amount of complacency has crept in. One commentator admitted that even at Bath, there was the scope for some pruning, but the U.G.C. cuts did not give room for manoeuvre, as in the case of Aston and Salford. One found agreement with with the suggestion that perhaps in the tighter financial conditions of the eighties and even greater competition among universities for students and resources, more direction and control was needed from the centre. As power at Bath is spread over the various Areas the V-C could not, or would not, exert his authority especially as the lenient UGC treatment, and his impending departure in July 1983 did not encourage him to take unpopular or drastic decisions.

It could be argued that the Committee structure which

had worked so well for Bath in the 60's and the 70's needs to be made more flexible and adapt itself to the 80's and the 90's by allowing greater power at the centre, mainly in the hands of the V-C and VCAC.

The appointment of Professor J.R. Qualyle as V-C has shown that more direction and control is likely to be forthcoming. During 1984/85 the Long Term Planning Committee (LTPC) spent eighteen months developing performance indicators for each of the fourteen Schools, and on the basis of this a strategic plan for the university was prepared for the 1985/86 session. The LTPC compared the track record of each School in attracting outside funding as compared with similar Schools/Departments in U.K. universities as a whole. The LTPC survey showed that in nine out of its fourteen Schools, Bath's performance was below the average U.K. performance. This relatively poor showing has come as an unpleasant surprise not least to Professor Quayle. Since then a special meeting has taken place between the V-C and the professors, at which he pointed out the magnitude of the problem and urged them to encourage their staff to new efforts.

According to Professor Quayle²²

[&]quot;If Government funding continues at present rate, then there is no chance of avoiding redundancies in the long run. The answer lies in our ability to attract more funds for ourselves and that means a much bigger

effort from everybody involved, it is up to all of us to make sure we stay in front. Solving this problem could well prove to be crucial over the next few years".

On the evidence of its past performance and the strength of its reputation we are quite confident that the University of Bath will be able to cope successfully with this problem.

The University of Keele

Suffering for the Sake of University?

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Chapter 12 -

The University of Keele Suffering for the Sake of Diversity?

12.1 The Keele Experiment

The University College of North Staffordshire, the forerunner of the University of Keele welcomed its first students in October 1950. Located in Keele Hall, a Tudor mansion extensively reconstructed in Victorian times, it was the first institution of university standing to be established after the end of World War II.

The manner of its founding was unprecendented and its educational programme unique. From its earliest days the College and its curriculum were referred to as the 'Keele experiment', and all those who were involved in the founding of the College - the promoters of the project, the UGC, which approved it and were providing most of the funds for its realisation, and the Universities of Oxford, Manchester and Birmingham, which agreed to act as its 'sponsors', all of them were conscious that they were committing themselves to a bold venture.

The founding of Keele has been described by Sir James Mountford as one of the great important events in the

history of English University education, and the Foundation Year in Keele's curriculum has been described by H.J. Perkins² as "the most original innovation in British University education this century". Later events have shown that the unusual financial and constitutional arrangements which were made when Keele was established decisevely affected the patterns which were adopted in the further development of newer universities in the 1960's.

More significant perhaps is the fact that Keele demonstrated that new and unconventional university curricula could be fashioned and implemented. A sense of freedom from established concepts of university education made it possible for the universities of the 1960's to plan exciting degree structures of their own even though they did not closely copy Keele.

The Foundation Year is Keele's solution to the conflict between study in breadth and specialisation. This course is planned to provide a main survey of three main areas: the humanities, the social science, and the natural sciences. The student is given a clear break from the specialisation experienced in the sixth form, and is given the opportunity to widen his or her vision and discover his real aptitudes at the very threshold of his or her university life. The Foundation Year was compulsory for all students until the Three Year Courses were introduced in 1973. Today it still forms the first year of the Four Year Courses and over 40%

of each year's intake is for this course. All departments of the University are represented in the Foundation Year Course, and students have an opportunity to sample a number of different subjects. At the end of the Foundation Year students choose which subjects to read for their degree.

The insistence on breadth of interests continues in the following three years. Either as principal or as a subsidiary subject every student offers a science and a non science subject. Thus Keele's curriculum is to be assessed as a totality and not judged solely by individual features; it was conceived as a whole from the start.

Another feature of the Keele experiement is the unusual residential arrangements which were adapted by Keele and contributed to its particular ethos. In the search for a suitable site for the College, the promoters of the project always had in mind that an appreciable number of students would be in College residence. When Keele Hall with its 150 acre estate (later extended to 650 acres) became available, the opportunity was taken to convert existing structures so that all students could be accommodated, and also to provide housing for staff and their families within the campus. So both staff and students were housed on the same campus at Keele. With both staff and students living on campus, Keele seems to have become a closely knit community both academically and socially. Today over 90% of undergraduates and 60% of staff live on the University

Campus.

The inherent concept which formed the educational pioneering of Keele's promoters was freedom, complete and untrammelled.

The only alternative apart from immediate full university status was to petition for power to award their own B.A. degree without seeking the right of awarding the full range of higher degrees. This was a constitutional innovation of the first magnitude.

The founders of Keele were aware of the necessity of some acceptable guarantee of academic standards. It was agreed that the Universities of Oxford, Birmingham and Manchester should jointly share the role of sponsors for the College and each appoint two members to join the Academic Council where they would be in a majority and have wide powers of approval for academic appointments and courses of study. These arrangements continued until the incorporation of the University of Keele in January 1962.

The ways in which Keele broke new grounds have been listed as follows: Mountford (1972).

- 1. Foundation Year common to all students:
- 2. A four year course for all students;
- 3. Two principal subjects in the final examination;

- 4. A science and a non science subject in the last three years;
- 5. No seperate courses for a pass degree;
- 6. Residence on campus for students and staff;
- 7. A scheme of sponsorship to guarantee standards;
- 8. The awarding ot its own B.A. degree;
- 9. Its foundation specifically approved by the U.G.C.;
- 10. Immediate financial support provided through the U.G.C.

Keele was conceived and planned as a small institution. Infact by 1971, twentyone years after its foundation, its total population was still below 2,000. Its rate of growth has been less than that occurring elsewhere; infact almost all the new universities had surpassed Keele in student numbers by 1971. (See Table 12.1) A number of factors have contributed to this aspect of Keele's development. In the first place there was a strong conviction among many at Keele that a small institution has an educationally valuable homogeneity which would be destroyed if the number of students were allowed to increase beyond some vaguely apprehended limit; consequently proposals for expansion were looked at askance by the upholders of this concept.

The second consideration is that the pattern of studies for a degree at Keele makes it necessary for expansion to be on a broader front than elsewhere. No single subject or group of subjects can grow, without involving a parallel, though not necessarily equal, growth in other fields.

Number of Students at New Universities - Autumn 1970

University	Undergraduate	Postgraduate	Total
Keele	1,611	252	1,863
Sussex	2,760	864	3,624
E. Anglia	2,422	293	2,715
York	2,001	4747	2,445
Essex	1,571	572	1,943
Kent	2,002	246	2,248
Warwick	1,608	511	2,009
Lancaster	2,353	451	2,804

The third factor is perhaps the most serious check on growth. As we have already seen the promoters of the College had argued from the start that it must be predominantly residential. Thus every increase in student number would need to be matched by an increase in residential accommodation for both students and staff.

In view of the above factors Keele's expansion during the seventies was comparatively low, reaching a student population of 2,650 in 1975/6 and its highest student total of 2,880 in 1980/81.

This introduction on the foundation of the University of Keele has been necessitated by a number of reasons. It is necessary to know the background of an organisation in order to be able to understand more fully the strategy adopted to meet the changes imposed on it. Moreover as the other U.K. cases in our study, i.e. Aston, Salford and Bath were previously technological colleges with a different foundation background it was important to examine Keele's different characteristics and background. Finally as Keele was a relatively small institution, (about half the size of Aston or Salford) and it was the hardesthit non-technological university the study of the strategy adopted by Keele should make an interesting comparison with the other case studies.

12.2 The UGC 1981 Cuts

In May 1981 the letter from the UGC Chairman on 'The Future Pattern of Resources for Universities', was sent to all universities, including Keele. In response to this letter two interim standstill measures were introduced after being proposed by the Finance and Policy Staffing and Development Committees:

- 1. Save in an emergency no academic or non-academic post which feel vacant should be filled
- 2. Out goings on the non pay side of Keele's expenditure should be planned for 1981/82 on the bases of the actuals of 1980/81 'i.e. without any upward adjustment to inflation).

At the same time, in a letter to the UGC two of Keele's central features were emphasized. Firstly, Keele's undergraduate offering of joint honours courses depended for its considerable appeal and for its academic effectiveness on its range of subjects and on the numbers of subject combinations that result. Any complete loss of a subject would therefore be not only the loss of that subject, but a more general impoverishment through the loss of a considerable number of combinations. Secondly any significant reductions in student numbers at Keele could lead to serious financial problems in the recurrent account of the halls of residence. For a highly residential university like Keele, the application of a marginal drop in numbers nationally could cause a disproportionate damage to its income.

The Chairman of the U.G.C. replied that these matters were already known to his Committee and had been noted, but of course he could not give any undertaking as to their effect on the grant distribution.

The cuts imposed on Keele were considered by the University Community to be harsh and unfair. During the summer
there was extensive lobbying against the cuts, with plenty
of support from Members of Parliament, members of Court, local
authorities, local Chamber of Commerce and many professional
bodies, plus vigorous efforts against the cuts by the relevant
trade unions.

It was soon clear that there would be no change of heart by the Government, neither any redistribution by the U.G.C. Keele's academics and administration needed to start thinking seriously and planning the strategy of how the University would cope with a loss of a third of its income over the next three years.

12.3 Strategy for the Early Eighties Document.

Early in November 1981, after a number of informal meetings and discussions with members of staff, the V-C Dr. D. Harrision sent out his Strategy for the Early Eighties document. This document outlined the future shape of the university and the measures it should take, as proposed by

the V-C, in the light of the reduced grant allocation from the U.G.C.

This report was given wide circulation within the University and Section 17 included a suggested timetable for consultations and discussions by the various committee.

1981

November Finance Committee preliminary consideration Put to Council for first time.

December Policy, Staffing and Development Committee, preliminary discussions which would include views of Board of Studies.

1982

February

Comments by Academic Departments. January Consideration and approval by Policy Staffing and Development Committee (P.S.D.C.)

Senate, consideration and approval. Council, consideration and approval. March

The Strategy for Early Eighties document was a detailed analysis pointing out the various areas of expenditure where savings could be made, and two or three areas where revenue could be increased. There was no attempt to introduce any rationalisation programme or

restructuring within the University. It was mainly a defensive document for coping with the cuts. The cut in the UGC grant translated into jobs would indicate a loss of funding for about 125 academic and academic related posts, and about 140 other posts. As these were staggering losses for a relatively small community the university had no choice but to start reducing the size of its total workforce by all voluntary means, voluntary early retirement and voluntary redundancy and resignation. Compulsory measures were not ruled out but were to be used only as a last resort. The draft schemes were adopted by Council and were available for discussion with appropriate unions by November.

At the same time it was planned that the university would do its utmost to mitigate the loss in the U.G.C. grant and home undergraduate fees by increasing its other revenue. A number of ideas and options were proposed, including the following:

increasing the number of overseas students; selling services and research expertise; strengthening the Resedential Services Account.

The academic departments at Keele fall under three boards:

A Board - Humanities

B Board - Social Sciences

C Board - Natural Sciences

The Strategy for Early Eighties document proposed that the A Board would lose 19 posts, the B Board 26 posts, and the C Board would lose 11 posts, a total loss of 56 posts over three years, which would reduce the University funded academic staff to about 230.

As we have seen it was envisaged that Council approval would be secured by March 1982 and implementation of the proposals could then start. Thus it was going to take over eight months from the receipt of the U.G.C. letter before any concrete action would be taken.

In our analyses of the three universities, Salford, Keele and Aston which suffered the harshest cuts one cannot but help noting the different ways and sense of urgency by which the imposed change was dealt with by the different institutions and especially the leadership and drive shown by the V-C concerned.

In the case of Keele the process was much slower in spite of the grave situation faced by the University. There seems to have been no sense of urgency. Furthermore, when eventually the Strategy for Early Eighties was published, there were really no radical proposals for any changes or re-structuring, leaving the University of Keele in 1984/85 not very much different than it was in 1981/82. In fact one gets the impression that low morale and pessimism amongst the Keele community was even greater in 1984 than

A number of factors are put forward as possibly contributing to the different attitude adopted by Keele. In the first place, Aston and Salford being Technological universities had already much greater contact with industry and commerce, and in Bath two thirds of the undergraduates were on sandwich courses where students spend at least a year in employment. Such employment besides providing the student with a wide and sound practical background, is a means of building greater understanding between the university and industry and commerce. With such contract established even before they became universities, they had more options open to them how to fight the cuts and to take quicker offensive measures (to increase revenue) as well as defensive measures (to decrease expenditure). Keele had very few contract like these.

Another factor which might have been conducive to Keele's lack of urgency was the lingering hope that there might be a change of heart on the part of the U.G.C. especially after the U.G.C. acknowledged the mistake which they had made in their attempts to convert Universities Statistical Record returns for Keele into student loads, and then further into student numbers.

In these conversions errors had arisen because of the difficulty of adapting a general system to fit Keele which

has a proportionate of cross disciplinary studies which is more than twice that of any other university. The U.G.C. gave assurances to Keele that this mistake had no effect on its decisions regarding grant and numbers at Keele, and that it had used accurate assessment of student load. These assurances were never fully accepted at Keele, and it was felt that important decisions had been taken by the UGC and its sub committees on the basis of statistical information about Keele, that was at best inadequate and at worst even misleading.

At Keele, there was certainly the feeling that they were being harshly penalized, partly because of a mistake on the part of the U.G.C.; this might have been another reason for the relative laxity with which measures to combat the cuts were proposed and implemented. At the same time no serious long term measures were introduced, and even the planned programme for staff reduction was not vigorously adhered to. Whilst it was envisaged that the academic staff complement would be about 230 by 1983/84, in fact it was still nearly 260. The U.G.C also recommended that the Russian department at Keele should be closed down. This directive has only recently been carried out. Again, when compared to Aston and Salford, it seems that the most important fundamental factor in determining the type of strategy an institution would adopt in a period of rapid change, and the vigour with which this strategy is pursued, is the personality, vision and drive of its leader, mainly

in the personality of the V-C. Whilst it is clear, that in the case of Aston and Salford, their respective V-Cs (who had just been appointed before the 1981 cuts) had clear objectives and goals for their institutions and provided the drive and leadership to attain those objectives, it seems that the situation at Keele was quite different.

12.4 The Implementation of the Changes

The impression that one gets is that what was done at Keele was mainly to play for time, and there was not the courage and urgency to take difficult and unpopular decisions. 'He took us to the brink, and then backed out', was the comment of one academic. 'He dithered and dallied and he could never take a hard decision, and in the end he deserted us, like a mouse deserts a sinking ship'.

"David was too much of a gentleman, to push his decisions down people's throats" was a less harsh comment. It is easy to criticize the V-C and use him as a scapegoat especially after he has left the institution. There is no doubt that when the subject of university closures comes up in conversation, the university which is most commonly included in one's hit list is Keele. From discussions and interviews with members of the University, one got the impression that slowly and surely a feeling of doom and

despondency has been growing amongst the Keele community, and this seems to have been accentuated by the departure of the V-C to Exeter in 1984. 'Since the invitation from Exeter was made in 1983, or maybe even before, there was less pressure on the V-C to make difficult decisions and more scope to play for time'.

In spite of all this, some changes did take place at Keele between 1981-84. In the rest of this case study we will look at these changes, by analyzing some of the performance indicators over this period, for example: changes in recurrent income from non U.G.C. sources, number of publications, changes in student numbers, changes in academic staff, students employability, etc. In this way we can be in a better position to assess how far the objectives set out in the Strategy for the Early Eighties Document (SEED) have been achieved. Finally we shall examine the changes which have been taking place since the coming of the new V-C, Dr. Brian Fender in May 1985.

The objective of the SEED was to put the university in a situation where it can be a viable institution in spite of the U.G.C. cuts. As pay items constituted over seventy per cent of university expenditure the main thrust of this document was to reduce staff from 290 in 1981 to about 225 in 1984. This target has not been achieved. As late as June 1984 Keele was still struggling to overcome the full impact of the 1981 U.G.C. Cuts. At the Senate meeting in

June 1984, the V-C submitted a controversial new strategy paper, which included suggestions 'for phasing out courses' and other associated activities, broadly associated with the net loss of at least twenty academic posts'. Soon after presenting this paper, the V-C left to take up his new post at Exeter.

This is perhaps the reason for some of the more poignant remarks made about the ex V-C. In any case the proposal for cutting out at least twenty academic posts in 1984, reflects a failure to reach the targets set in 1981.

The student population reached its peak in 1981/82 and although in the following year there was a reduction in home student numbers it was not enough to satisfy the U.G.C., with the results that a £20,000 fine was imposed on Keele for disregarding UGC directives. Non-home fee paying students doubled between 1981-1985, and greater efforts are being made to increase their number further and consequent revenue deriving from them.

In 1985 the number of Keele's graduates that went into commerce was double that of 1980. In 1980, the number of graduates still unemployed after six months was 17.5 percent. In 1985 it was 11 percent. This seems to indicate that overall employability of Keele's graduates had been slowly improving over this period. The Mean 'A' level scores of Keele's applicants rose from 7 points to 10 points. Though

this was an appreciable improvement, it was still below the national average.

Table 12.2 shows Keele's performance on a number of indicators for the period 1980-85. As one can see from this Table Keele's overall performance has been improving on all indicators. The percentage of higher degrees awarded went up from just over 14 per cent in 1980 to 19 per cent in 1985. Staff publications rose from 1.8 per member of staff in 1980 to 2.49 in 1985. The income earned by the university, i.e recurrent income excluding UGC grant and home fees rose from 11.3 per cent in 1980 to 25.7 per cent in 1985.

During 1983 a number of developments took place which indicate that Keele was slowly realising that it had to be more outward looking and aggressive if it was to survive highly competitive environment. At the start of the academic year the University started for the first time a Principal course in Management Science. This course received significant encouragement by way of additional funding from the U.G.C. to support the teaching of Accountancy. The Management Science course also benefits from assistance in teaching from Peat, Marwick and Mitchell, the University's auditors, the University of Manchester, and International Computers Ltd.

In March 1983, the Consultancy firm of Arthur Anderson submitted their report on the financial situation of the university - and the principal finding was that significant

University of Keele

Summary of Key Performance Indicators

	1980	1981	1982	1982	1984	1989
MEAN 'A' LEVEL SCORES UNIVERSITY ENTRANTS AVERAGE	7	7.7	8.5	6	9.6	10
FULL TIME STUDENT POPULATION	2,818	2,801	2,881	2,803	2,729	2,684
HIGHER DEGREES AWARDED AS A PERCENTAGE OF TOTAL	14.1	16.3	15.9	18.7	17	19
% OF STUDENTS UNEMPLOYED WITHIN SIX MONTHS OF GRADUATING	17.5	14.9	13	6	01	=
ACADEMIC STAFF WHOLLY UNIVERSITY FUNDED	291	298	290	267	258	246
STAFF STUDENT RATIO F.T. STAFF/F.T. STUDENTS	1:9.7	1:9.4	1:9.9	1:10.5	1:10.6	1:10.9
PUELICATIONS AVERAGE PER MEMBER OF STAFF	1.8	1.86	2.25	2.09	2.37	2.49
RECTREENT INCOME (EMC UGC SEATT & HOME FEES) % OF TOTAL	11.3	13.8	19.4	19.9	24.5	25.7

opportunities existed for enhancing the University's finances. Proposals were submitted for reforms in the budgetary process and for better use to be made of the university's reserves and property assets.

Towards the end of 1983 an agreement was reached between the University and Newcastle Under Lyme Borough Council, with the approval of the Secretary of State for the Environment outlining planning permission for the development of a Science Park on Keele's campus. The aim of the Science Park is to bring on Campus new and growing business, specializing primarily in scientific research, development and consultancy. Incoming firms will benefit greatly from the expertise of the university's staff, and will have access to the laboratory, computing and other facilities on campus. Conversely, the presence on campus of a group of academically oriented entreprenuers can be expected to stimulate research into areas of commercial relevance and provide new input into teaching.

Early in 1984 the University acquired the services of Dr. Hugh Roberts as Industrial Läison and Business Manager. He was previously a Senior Manager at the Mond Division of ICI plc and his salary for the next two years was being covered by that company. His first task was to identify areas which, if developed commercially, would be of maximum benefit to the university and to advise on the proposals for the Science Park.

This brief survey of the strategy adopted by Keele since 1981, and the changes which have taken place, seems to indicate that enough was done to keep Keele viable in spite of the harsh cuts. Over the short term period the strategy adopted and implemented was successful. After all it was a strategy for the early eighties which the V-C submitted. On the other hand one has to consider the long term surival and viability of Keele as an institution, and a number of factors should be taken into consideration in assessing the strategy over the long term period.

The 1981 cuts were not a once and for all exercise. As we have witnessed continually since then, the policy of contraction, retrenchment and cuts in higher education may continue into the 1990's. The May 1985 Green Paper states that it expects the decline in student numbers to reach its peak in the 90's.

"The years between now and then allow opportunity to to plan and resolve other policy question. It is not improbable that some institutions will be closed or merged at some point during the next ten years".

It was this type of statement which made the Keele community feel rather apprehensive about their future. As it was getting clear that the policy of retrenchment in higher education was going to continue indefinitely there was a growing pessimism that not enough had been done at Keele to prevent it from being one of the most likely

candidate for closure.

"The feeling of gloom was greater in 1984, and morale much lower than in 1981"

said one commentator,

"In 1981, it seemed somehow we were all in it together, or started from the same place, now we feel alone, starting from behind".

Finally, if one considers the changes and restructuring which took place in other hard hit universities, and the great sacrifices and efforts involved in the process of adaptation and change, in 1984, Keele seemed to be a long way behind.

Thus when everything is taken into consideration, Keele's short term strategy seemed to have been relatively successful; but as far as long term strategy is concerned Keele simply did not have any: It is only in the past few months since the coming of the new vice-chancellor that such a long term strategy is emerging.

12.5 The Change in Leadership

In October 1984, Dr. Brian Fender, Director of the Institute Max Von Laue Paul Langevin, Grenoble, was

appointed V-C of Keele. He took up his new posting in May 1985.

During the past year there has been a transformation on the Keele campus, and as things started to move at a quicker pace, there is a general feeling of optimism that Keele will overcome its problems and survive.

Rationalisation has been taking place in a number of departments. The departments of French, German and Russian Studies have been re-formed into a Department of Modern Languages. The Departments of Sociology, Social Anthropology and Social Work have also been merged.

In addition, there has been a new professorial appointment in Chemistry - a joint appointment with Darisbury

Laboratory - and the first holders of newly elected chairs
in Electronic Engineering and Psychiatry will take up their
posts in the early part of 1986.

The University is currently (January 1986) engaged in appointing Professors in: Computer Science (a new chair), Management Science (a new chair), Mathematics, Music, Traumatic Orthopaedic Surgery (a new chair financed by the Health Authority). If these appointments materialise, it means that within a year of the arrival of Professor B. Fender about ten new Professors would have been appointed at Keele.

This is in marked contrast with the Aston Case - where no professorial appointments have taken place since the coming of Professor F. Crawford in July 1980⁶.

One of the qualities which the new V-C brought to Keele and which seems to be fully appreciated by the academic staff is the sense of urgency to settle outstanding problems and to create a structure more responsive to external pressures.

It was the V-C's view that for a comparatively small organisation like Keele the organisational structure was pretty complicated. A start has been made by reorganizing and streamlining the Senate's committee structure.

The detailed business of the Senate will be dealt with by three major committees.

- 1. The Planning and Resources Committee will deal primarily with general academic strategy, financial planning, definition allocation of the University's academic and financial priorities, allocation of resources to academic research committees and major organisational matters.
- 2. The Academic Standards Committee will take over the functions of the Admission and Tutorial Committee, also of the Higher Degree Committee, as they affect admissions of postgraduate students, monitoring of progress, award of degrees/diplomas; allocation of resources for teaching purposes; appraisal of courses at undergraduate and postgraduate level.
- The Research Committee will deal with the development of research policy and the allocation of resources for research, the nomination of research awards and University Research Studentships, and the encouragement of applications for research awards from external bodies.

These committees have delegated power from the Senate and have the capacity to form any necessary sub-committees and informal groups that may be necessary. Nine Senate committees will disappear.

The aim of the new set-up is to minimize the amount of time that individuals spend on a relatively unproductive activity and thus have more time for teaching and research. The new structure also seems to have increased the efficiency with which the university is responding to outside bodies. It takes advantage of Keele's small size and relative ease of communication to keep formal structures to the minimum. The spirit of the new set up is to encourage to the maximum working meetings of participants with a contribution to make and to minimize the repetitive 'watchdog' activities of a long series of sequential committees.

In October 1985 the Council approved the new structure for its sub-committees. Only two Council sub-committees remained. They are the Staffing and Organisation Committee and the Finance Committee. Other committees that formerly reported to Council are to become advisory groups under the Chairmanship of a Counci Nominee. These include: Estates and Euildings, Residential Services, Appointments and Counselling, Chaplainces, Medical Services, University Safety and Physical Recreation.

Three Council Nominees will also serve on the new
Senate sub-committee, the Planning and Resources Committee.
The new streamlined committee structure both of Senate and
Council resulted from the initiative of the New ViceChancellor and it is in line with the recommendations of
the Jarratt Report on expediting decision making in Universities.

Changes in committee structure took place at Aston and Salford soon after the cuts in 1981, and at Bath much earlier.

In a recent talk on Keele into the 1990's the V-C outlined a number of areas in which he sees Keele forging ahead in the next decade. Strong international links are absolutely necessary; Keele should be a window on the world. Research links have already been established with Sri Lanka, Taiwan and Czechoslovakia. Keele should endeavour to become an international community. Already overseas students number over 12%. These are mainly from Commonwealth countries. Greater efforts will be made to attract more European and American students to Keele.

Educational innovation is to continue unabated both in principal and subsidiary courses. Keele's courses have to be continually adapted to meet new demands and new situations. Research activity is to be expanded with emphasis on more inter disciplinary activities. Keele has been selected by

the DES as the first centre for Irish studies in the U.K. and it is hoped that about forty undergraduates will be starting this course in the near future.

Local links with industry, commerce and educational institutions will be strenghtened. A Health Planning Management Centre has been set up in cooperation with local authorities.

One of the areas which has been neglected by Keele is the provision of short courses. A Director of Short Courses has been appointed with the aim of finding out how this growing and profitable field could be served by Keele.

Finally, extra curicular activities, like Music, Drama, etc which at Keele form an integral part of the curriculum will also be expanded and enhanced. With sixty per cent of staff and over ninety five per cent of graduates living on the campus, Keele is not only an academic community, but a complete community with all the social activities this entails.

Since early 1985 discussions had been going on between representatives of Keele University, North Staffordshire Polytechnic and Staffordshire County Council with the object of increasing cooperation between Keele University and the North Staffordshire Polytechnic with the eventual aim of integrating them into one body.

The initiative to discuss closer collaboration between the two institutions came from Keele's new Vice-Chancellor within a short time of taking office. His concept of a possible regional university stemmed from his experience over the previous five years at Grenoble where he was Director of the multinational Institute Laue - Langeven.

The working Party which consisted of three members from each of the above three institutions published its Report in November 1985⁸.

"The prospect could be of an institution which could combine the status and the excellence associated with Universities, with the range of opportunity responsiveness and innovation associated with Polytechnics - a prospect of extending the range of that elusive concept 'quality' and doing so in the context of responding to the growing and well grounded demand for social accountability in higher education. We believe that opportunity exists in Staffordshire'.

The Working Party quite early in its deliberations concluded that substatnial advantages were to be derived from a full amalgamation and that such an amalgamation was feasible. Accordingly the Report is structured around that possibility. In fact in Chapter 4, 'The Mechanism of Transition' it sets out a proposed summary timetable of the main events (steps) from the Publication of the Report in Autumn 1985 to the establishment of the New University (University of Staffordshire) in 1989.

Like all other Universities the University of Keele

was requested by the U.G.C. to provide it with plans for the next five years in the light of continuing financial squeeze of two per cent per annum for the rest of the decade.

The University of Keele's submission of its plans to the 1990's stated that the general aims of the University of Keele can be simply expressed in terms of breadth of education at the undergraduate level and the encouragement of inter disciplinary research

The University is also committed to extending its links with its region. Originally these centred mainly on education, adult education and arts, but more recently have involved a rapidly growing Department of Postgraduate Medicine. Collaboration with local industry and commerce will be enhanced in particular by the new chairs in electronic engineering and in management science, and by a professional appointment in physical chemistry. The university sees this interaction with the region as a crucial element in its future development.

The Jarratt Report 10 has noted that there is a distinct shift in the style of the modern V-C from being a scholar, acting for and carrying out the will of the Senate, to a Chief Executive style bearing the responsability for leader-ship and effective management of the institution.

Asked how a V-C can be a Chief Executive if he has not the power invested in him, which usually goes with such a post, Professor Fender 11 replied

"The power of the V-C depends on his power of persuasion, to persuade his colleagues, to give him the necessary power and authority to make quick decisions and to get things done, and in some cases get them done very quickly".

One can safely say that with its energetic new V-C and the enthusiasm and optimism he seems to have already infused into Keele's community within such a short period of time, Keele's chances of survival are much better than they were a year ago.

"At any rate if we go down, we go down with a bang"

was the remark of a senior academic.

The University of Salford

A Case of Diversity in Activity

Direction and Emphasis

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Chapter 13

The University of Salford A Case of Diversity in Activity Direction and Emphasis

13.1 Introduction

The Salford Working Men's College was established in 1858 as the successor of the Manchester Mechanics Institution and the Salford Lyceum. In 1889 the Salford Borough Council appointed a Technical Instruction Committee to report on "the necessity for providing technical instruction for the artisans of the borough". The College moved into an entirely new building in 1895 which served as the main building until 1960. In 1896, Queen Victoria commanded that the Institute be called Royal Salford Technical Institute. In 1956 it was designated as a College of Advanced Technology².

The pressures for technical education in the post war period became, with Manchester University's unresponsiveness³. Salford's opportunity. The introduction of the sandwich courses from 1949 onwards provided links with industry particularly local. Growth was rapid especially in the sandwich course, temporary buildings were acquired or rented, whilst a new building started in 1954 and opened in 1960. With the cooperation of Salford Corporation expansion of the College site in Peel Park became possible to a total area

of nearly sixty hectares and substantial academic and other buildings were erected.

In October 1963 the Robbins Report was published which recommended that all the necessary steps should be taken immediately to grant Charters to, and change the Colleges of Advanced Technology into Universities. Salford received its Charter on 4th April 1967. In 1963 the number of students was 1,660. In 1972 when the second V-C Professor Horlock, moved in he was set the task by the Council of increasing Salford's student population to 7,000 by 1980. Financial stringency affected the development of the proposed University of Salford in its formative years, and both staff and students had to reconcile themselves to over crowded, unsatisfactory, and temporary accommodation in the late sixties.

A university can be seen as more than the total of its physical parts and the final session of the college saw great progress in the academic preparations for the first session of the proposed university. These included such novelties as first degree courses in gas engineering and in engineering dynamics, and a combined Honours course in chemistry and economics. Such developments were in the tradition epitomized by the institution

[&]quot;established to provide for the County Borough of Salford systematic instruction in those branches of knowledge which have a great bearing upon the leading industries of the district"4.

During the 1970's the University of Salford continued to expand at a steady pace and by 1981 it had a student population of 4,600 including 600 overseas students and a staffing establishment of 845 of which nearly 500 were academics.

From its early beginnings Salford distinguished itself from the traditional style university and traditional activities and this strategy was increasingly followed after the 1981 Cuts. Like the rest of the University sector, Salford expected in 1981 that its funding would be affected and reduced in the forthcoming UGC proposals; what was not expected was the extent and the savagery of the cuts, and what is still not yet explained is why Salford was singled out for such a harsh treatment with its funding reduced by 43% making it by far the worst cut University.

In this case we will examine how the Salford academics and administrators reacted to these cuts, what defensive and offensive measures were taken to meet the reduced funding. We will examine the creation of the University Plan 1981/84, (1984/85), and the staff participation in its formulation and execution and the new organizational framework which has been created. Finally we shall try to assess on a number of indicators Salford's achievements to date (December 1985).

Before examining the plan itself there are a number of points which should be considered. First, until 1981 most plans were produced in response to demands likely to be made upon the university and its services. The 1981 plan was to be in response to a cash limited budget which was going to be reduced by nearly a half over the next three years, later extended to four. Cash limited plans can only be indicative and are by their nature tentative and especially in a period of inflation, the relationship between resources and money is uncertain. Demand driven plans are by contrast expressed in resources (not cash) and can thus be prescriptive rather than indicative.

The second point that should be considered was that in spite of the extent and the urgency imposed by the U.G.C. cuts on the nature of the planning process, none of the established procedures and committees of Senate was altered. The main innovation that took place was that the Development and Estimates Committee and the Academic Policy Committee of the Senate, met jointly on a number of occasions. (The important organisational and structural changes to result from this innovation are discussed later in this Case Study). It could be argued that a new process and structure at the same time might have been confusing, perhaps resulting in a challenge to the legitimacy of planning. The old structure

was used to introduce the new process, and later on new informal committee structures arose to reflect the novel demands of the new planning process. The final point is to recognize that the plan is only a means to an end. In the case of Salford it was to accommodate a radical change in the size and activities of the University. In order to achieve this end it was deemed appropriate to have a high degree of consensus about the nature of the plan itself and an attempt to obtain the commitment on the part of all members of staff to those actions for its implementation.

Two points should be stressed about the means whereby the academic plan emerged. The new V-C postulated from the start that whatever plan was finally adopted, it had to be one that was broadly accepted by the majority of staff in the academic sector as being the best that can be produced within the constraints of the situation.

In order to gain broad acceptance for the plan, staff were to be given every opportunity to participate in its formulation at every stage; no relevant information should be confined to any inner group, consultations and discussions were held with and active participation sought from as wide a group as possible.

[&]quot;There was considerable consultation and 'bottom up' planning, and the consultation process was one in which those consulted could radically alter the plan itself"5.

In order to have an acceptable plan and as wide a consensus as possible the U.G.C. 1st July 1981 letter was made available to the Trade Unions representative the following day and their cooperation and involvement was procured from the start.

As one academic put it,

"We were not in a situation of bargaining with each other for a larger slice of the cake, but it was as if some natural disaster had hit Salford and we all had to stick together and fight for survival".

This is how the V-C Professor J.M. Ashworth described the response of his staff;

"I have been impressed by the dedication that everyone has shown and the way personal considerations have been transcended in the cause of the collective good. An unpleasant and in many ways an extremely distasteful task has been done with dignity and some nobility"6.

In 1981, despite emergency measures which took £1.25m, out of non-staffing expenditure, the University was still running a substantial deficit of nearly £1m. Quick decisions had to be made so that action could be taken to produce a more balanced budget. If no remedial action was taken the University could face a deficit of £6.5m by 1984, and be bankrupt long before that date.

It was inevitable that substantial reductions in expenditure had to be made; the reductions proposed were in the form of early retirement and voluntary redundancies and therefore a considerable lead time was necessary.

Against this background, the Council asked the Senate, through its Academic Policy Committee and the Development and Estimates Committee acting jointly to prepare an academic plan, by 1st December 1981, which reflected the reduced resources available.

13.3 University Planning to 1983/84 (1984/85)

The formulation of the Academic Plan was approached in six stages (discussed below) and these consecutive stages could be further divided in Phase A (stages 1-4) and Phase B (stages 5 and 6). Phase A consisted mainly of academic judgements. Phase B consequential managerial judgements. It was important that these two very different kind of judgements be kept separate, and not allowed to interefere with one another. Thus Phase A was carried out first and results approved by the Senate; it was only then that work began on Phase B.

The four stages in Phase A involved the following:

- 1. determination of the future number of students in the university as a whole, for planning purposes.
- 2. within limits set in 1, determination of the split between 'arts' and 'science'.
- 3. determination within 'arts' and 'science' of the future of individual subjects and/or departments.

4. determination of the future size and the nature of the academic support services.

In order to elicit the information for the joint committee and to help it in considering the future of individual departments and subjects, on 15th September the V-C sent a memorandum to all departments, asking, against a background of hypothetical resource reduction for replies to certain questions concerning interalia, the possible discontinuation of specified undergraduate and post graduate courses and research activities. These hypothetical reductions were derived from the U.G.C. advice given in its letter of the 1st July and subsequently amplified at a meeting with the Chairman of the U.G.C.

Within the constraints imposed and guidance given by the UGC, the Senate agreed that a policy of 'equal misery', between 'arts' and 'science' should not be adopted. This would be a recipe for mediocrity and the university would soon find itself unable to support adequately any first rate activities and to provide a well found base for attracting outside funds. It would also damage the view of the University held by outsiders and give rise to claims that the institution was not fit to manage itself, because it had shied away from harsh and necessary decisions. The Senate was strongly of the view that the University must preserve the best of what it had and lay the foundations of future excellence.

A detailed consultative and planning process was initiated in which each member of the academic staff could be involved, participate and contribute in the formulation of the Academic Plan.

At the conclusion of Phase A of the planning process in October 1981 the Senate approved a number of recommendations including the following:

- a) that the university plan for a full time home population of 3000 by 1984/85.
- b) that within this target, 810 be 'arts' based and 2190 be 'science' based students.
- c) a wholesale rationalisation of degree programmes, (24 degrees discontinued and 8 new ones introduced) and a planned student number for 1984/85 by faculty and department.

Phase B of the plan related to the reduced financial resources and how the University could continue to operate within the constraints imposed by the U.G.C. As in most other universities, over seventy per cent of recurrent expenditure is made up of staff salaries and if the University was to balance its budget a comparable reduction in staff had to take place. Accordingly the plan submitted at the end of November 1981 embodied the proposals shown in Table 13.1 - a proposed staff reduction of nearly 30% in three years.

Table 13.1 shows the number of staff in post in October 1981 and projected number for 1983/84. Since they took

TABLE 13.1

University of Salford

Staff in post October 1981

Projected 1983/84

		STAFF ESTABLISHMENT		
N POST Octobe	r 1981		PROJECTED 1983	/84
ACADEMIC	468		ACADEMIC	328
TECHNICAL	277		TECHNICAL	184
SECRETARIAL	100		SECRETARIAL	70
				-
	845			582

Source: University Planning to 1983/84 (1984/85)

place in a number of universities the processes by which these reductions were effected are now quite familiar. These included departemental closures and amalgamations with substantial incentives for voluntary redundancies and early retirements and employment of redundant or retired staff on a part time basis etc.

We will now examine briefly some of the measures which were taken to make the blow less severe, and to ensure that the amount of human hardship, misery and frustration, would be reduced to the minimum, in view of the large amount of staff reductions that necessarily resulted from the UGC cuts.

13.4 The Consultation Process

Though a 43% Grant cut was hardly ever contemplated, it was clear from the mid seventies, and especially after the 1979 elections that university funding would be considerably reduced in the 1980's. In view of this, since the beginning of 1980 a number of University posts were frozen and remained vacant.

When eventually the U.G.C. letter arrived the process of consultation started in earnest from the earliest stages, and the U.G.C. letter was made available to Trade Union representatives the following day. This made it easy for

staff representatives to be fully involved in formulating the survival plan for Salford. There seems to have been a stable and long standing relationship of mutual trust and confidence between unions and the management of the university and attitudes were constructive and cooperative.

This helped to preserve some measure of morale and dignity in the phasing out of 150 academic staff without causing them undue hardship and at the same time continui the operations of the University as smoothly as possible. This contrasts sharply with the stand taken by the unions and the resultant bitter struggles between them and the University authorities both at Aston and at Keele.

Though the number of students was going to be reduced by over 20% the eventual phasing out did not take place until July 1984, and in the case of 4 year courses until 1985. In view of this, the services of many of the lectures who were leaving were still required for some time to come at least on a part-time basis, thus staff who took up early retirement or redundancy could be re-engaged on a part time basis at one third of their previous salary and continue to teach their specialisation. This meant that the 'redundant' academic was assured of some income for some time to come and the University could have the services of three specialists for the price of one, with no disturbance to its courses.

"In this way the academic plan was formulated to fit the strategy of the university instead of being simply the outcome of random staff retirements as is too evidently the case elsewhere"8.

Another factor which contributed to the successful implementation of the plan was the feeling of comradship which seems to have existed at Salford and this contributed to the atmosphere of fighting together for the survival at Salford.

"It was pretty grim. People were disbelieving and desperately disappointed. We were angry, of course, but absolutely determined not to do what most people expected which was to tear ourselves apart with infighting".9

There was a belief that no one in the university was responsible for the disaster which befell Salford so they joined forces together to fight the outside enemy and to prove, that in spite of the savage and unjust treatment, they had the resilience, spirit and determination to ensure that Salford will not only survive, but will grow, develop and adapt to meet the demands made upon it.

The renewed Salford has been constructed around the twin cornerstones of 'technology transfer' and 'education for capability' building up the university's relationship with industry around a professional framework.

The Academic plan could be considered as Salford's

defensive response to the burden of the cuts and to survive. On the other hand it had to take other measures to consoli-date and grow.

13.5 Developments since the UGC 1981 Cuts

The period since 1981 has been a period of rapid and fundamental change as the University administration is committed to become a first class technological institution. With this strategy in mind the main thrust of the University's philosophy is its multifaceted relationship with industry. We will examine briefly the major examples how this philosophy finds expression: some of which are unique to the University of Salford.

13.5.1 Campus

Within a few days that the cuts in U.G.C. grants were announced a campaign was launched with press conferences in London and in Salford for the support of Salford University. Spontaneous support was received from leading figures in industry, commerce and the public service.

From this body of support Campus (Campaign to Promote the University of Salford) was formed. Thus initially its role was to provide a focus for a campaign to fight the cuts. Today it exists to strengthen and develop the links between

the University and industry, commerce and the public service.

Campus is a Charitable Trust and run by a Board of Trustees. It has a full time director and a number of support staff. Individual companies and organizations are invited to membership of Campus and asked to support the University by involvement in its life and work. In return they are offered the chance to benefit from the University's expertise and research facilities.

Appropriately qualified members of the academic staff act as liaison officers with each member organisation of Campus. Membership subscriptions are levied anually on a sliding scale to accommodate member companies, from 10 to 10,000 employees. Within the University, Campus has already contributed to initiatives such as:

13.5.2 Mobecs

Mobile Education Centres are double decker buses equipped to bring university technology to schools and industry.

13.5.3 Integrated Chairs

Integrated professors are full professors who at the same time exercise both main line managerial responsibilities in a commercial or industrial firm and direct academic work

in the University. To date Salford has four such professors.

13.5.4 Campus Venture and Enterprise Fund (CAVE)

Over the last three years, nearly £1m of the University money has been allocated to the CAVE Fund. Members of the University may apply to the CAVE Fund to finance research and development projects. The bids are assessed by experts drawn from Campus member firm and final decisions are made by a committee made of academics and Campus representatives. Ten per cent of Campus income goes to the CAVE Fund. Over 50 projects have benefited from the Fund. The Fund finances the production of a prototype which can be presented when venture capital finance is sought. Profits from a successfully developed prototype are ploughed back into the Fund.

13 5 5 Campus Senior Lecturship

One of the aims of Campus is to enable university staff to gain some of the benefits that might otherwise be denied them as a result of cuts in funding. Each year a number of lecturers are promoted to Campus Senior Lecturerships, the increased salaries being paid from Campus fund. There are now twelve lecturers holding Campus Senior Lecturships and a number of staff members enjoying the benefits of a Campus reward scheme.

13.5.6 Teaching Company Schemes

Salford is at the forefront of Teaching Company Schemes with more than a dozen companies now involved. In this scheme university staff work with young trainees graduate engineers and managers in the company concerned to solve 'real life' company problems. This scheme is funded 25% by the Department of Trade and Industry, 25% by the Science and Engineering Council, and 50% by the collaborating companies.

13.5.7 Technology Transfer

Technology transfer via new companies, new products testing and consultancies. Some examples of new companies/ products are AVR Hydropower Ltd, production of water engines to generate water from low heads of water; Pensec Ltd. security systems; Physiometrics Ltd, microprocessor developments. Most of these developments have been made possible through SUIC.

13.5.8 Salford University Industrial Centre Ltd. (SUIC)

It offers a high quality design and consultancy service tailored to meet the needs of clients using either its own full-time staff or drawing upon the wider resources of the University. A wide range of expertise is available with

particular strengths in Micro Computer Systems, Manufacturing and Quality Assurance, Engineering and Project Management.

13.5.9 Salford Civil Engineering Ltd (SCEL)

This was formed in early 1984 to provide a wide range of professional services in Civil Engineering and allied fields. SCEL's own specialist facilities and full-time qualified personnel are backed by the skills and resources of the academic staff and the extensive laboratory and testing facilities of the Department of Civil Engineering of the University. SCEL is run on strictly commercial principles supplying services which are efficient, confidential and cost effective. It can provide consultancy, design, research and testing services in a number of areas including Hydraulics and Hydraulic Engineering, Structural Engineering, Concrete and Cement Products, Soil Mechanics, Construction Materials, Highway Engineering, Construction Technology and Management and other fields.

In 1980 SUIC contiributed less than £ m towards Salford's University Income; in 1985 the combined contribution of SUIC and SCEL amounted to nearly £3m.

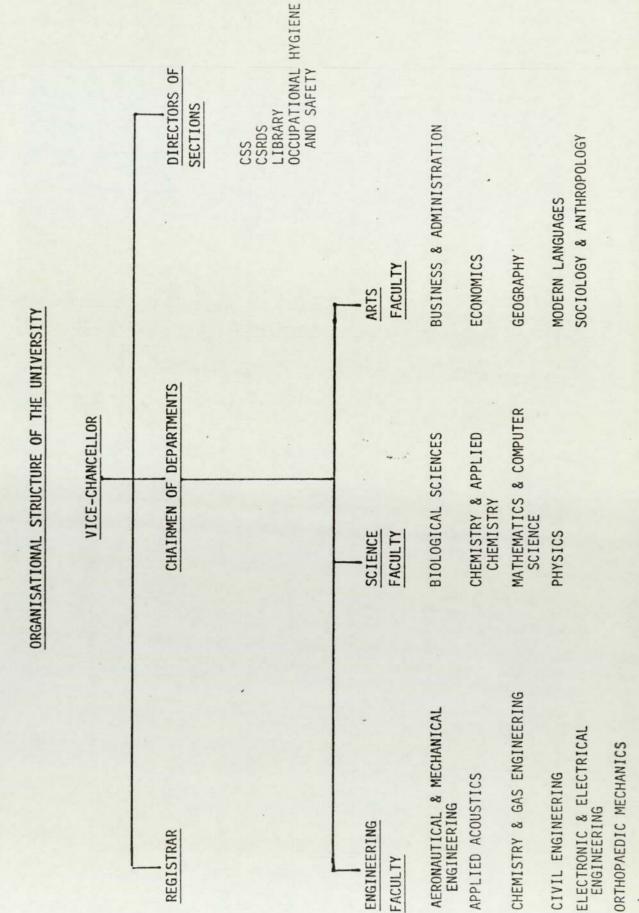
At Salford, even the student's union has formed a company to compensate for its loss of income: Super Services Ltd. running a local public house leased from a brewery.

In 1982 the Senate approved a document 'Aims and Objectives November 1982' (see appendix C). It legitimised all these changes and often unorthodox links with industry, but more importantly, it maintained that the purpose of teaching is to 'educate for capability'. A Salford graduate is expected to 'cope, to do and to deliver'. One way to develop and foster these skills in its students is for the University to be fully involved with industry and commerce in projects like those described above.

13.6 The Organisational Framework

The formal organisation at the University of Salford was, and still is similar to that which is commonly found in other English Universities, Court - Council - Senate - Faculties - Departments.

The main functions and duties usually carried out by these committees have been discussed already in chapter 6. Most of the work of these committees is carried out by proliferation of sub-committees of the various committees acting independently and sometimes jointly. At Salford the Council has 14 Standing Committees and the Senate 27. There are also a number of Joint Committees of Council and Senate. The infrastructure of Council and Senate is shown on Figure 13.1 whilst the Organisational Structure of the University is shown on Figure 13.2. It can be argued that in



the current situation a modern university needs a less rigid and a less complex structure than previously in order to enable it to be more responsive, flexible and adaptable to the increasing demands made upon it. At Salford this problem has been tackled by a small number of formal and informal and interlocking committees.

We have seen that in 1981 it was the Academic Policy Committee and the Development and Estimates Committee of the Senate which acting jointly under the Chairmanship of the Vice-Chancellor were mainly responsible for formulation of the proposals for University Planning 1981/84. Since then these two committees acting jointly and another sub committee have been the main vehicle through which University policy and planning are formulated and executed. In 1981 together with the Academic Plan a similar plan was formulated for the Non Academic Sector. An adhoc group was set up to submit proposals to Council. This group included the Chairman of the Finance Committee and the Chairman of the Non Academic Staff Committee both being sub committees of Council. This group, plus the Chairman of the Estates and Buildings Committee, the V-C, the three pro V-C, and the Registrar, meet regularly on an informal basis at least once a term. In this way the Council is fully aware of the developments which are taking place at the University, and the University is kept fully aware of the developments which are taking place externally and which are likely to have an influence on its policies.

These two informal sub committees whose membership comes from both Council and Senate are the two main bodies through which ideas are generated from which polices and plans are formulated. Since these two sub committees are both compact and informal they are in a better position to respond quickly to changing environment. Figure 13.3 shows the membership of these two committees.

The changes which have been taking place at Salford and the resilience with which it faced up to the difficulties imposed by the cuts seems to have attracted an even larger number of applicants to its courses. In fact between 1980 and 1985 the number of applicants for Salford places more than doubled, rising from 6 to nearly 14, as shown on Figure 13.4. At the same time the 'A' Level scores of these applicants rose from 7 points to 10.8 points during the same period.

According to the Director of Salford's Careers Office the ultimate purpose of going to a University is to get a job. Salford comes out creditably high in its ability to place in various branches of industry and commerce the students who have learned their skills at the University.

The University plan 1981/84 envisaged an academic staff reduction to about 330 by 1984. This figure has not been fully achieved. One of the main reasons put forward has been the large increase in part time students over the past

SALFORD INFORMAL COMMITTEE STRUCTURE

Sub Committee No.1

Sub Committee No. 2

SENATE

COUNCIL

Academic Policy Committee
Development & Estimates Committee

Estates & Building Committee
Finance Committee
Non Academic Staffing Committee

Membership

Membership

Vice-Chancellor

4 Pro Vice-Chancellors

Deans of Faculty

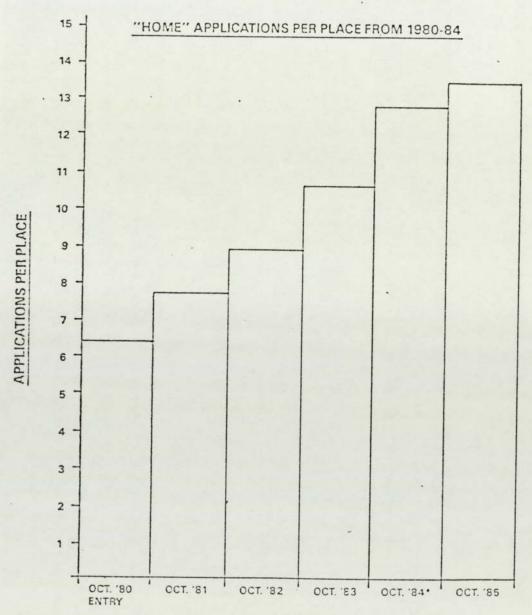
11 Members appointed by Senate from Academic Staff 3 Chairmen of above Committee

Vice Chancellor

4 Pro Vice-Chancellors

Registrar

SALFORD



^{*} Includes 41 additional places agreed with UGC

few years, both at undergraduate and at graduate level. In the academic year 1985/86 the number of part time students at Salford is over 750.

Another area which we have investigated in our case studies is the number of publications by the university staff as shown in the Annual Reports. At Salford the number of publications per member of staff went up from 1.22 in 1980 to 2.12 in 1985. Table 13.2 shows a summary of the Key Indicators for the University of Salford for the period 1980/85. One of the main objectives for the changes introduced by Salford since 1981, is to generate extra income to compensate for the cuts in U.G.C. grants. The measure of the success in achieving this objective can be gauged by examining Table 13.3 in which it can be seen how Salford's external income has grown from 16% in 1980, to 39% in 1985. The external funding generated per member of academic staff has increased from £2,500 to almost £6,500 over the same The V-C, Professor J.M. Ashworth, believes that the process has gone about as far as it can go.

"In my judgement, the proportion about two thirds (U.G.C.) to one third (non U.G.C.) is about right in the present conditions and it is in very broad agreement with what we know of how academics spend their time" 10.

When these changes and innovations were discussed with members of the university there was a general agreement that these were mainly prompted by the UGC cuts, and though

TABLE 13.2

University of Salford

Summary of Key Indicators

	1980	1961	1982	1984	1984	100
MEAN 'A' LEVEL SCORES UNIVERSITY ENTRANTS AVERAGE	7.2	7	8.2	9.1	10.1	10.8
FULL TIME STUDENT POPULATION	4,584	4,549	4,347	4,143	3,835	3,577
HIGHER DEGESTS AWAEDED AS A PERCENTAGE OF TOTAL	16.4	17.5	17.1	15.1	15.4	23.7
% OF STUDENTS UNETLOYED WITHIN SIN NOWHES OF GRADUATING	8.7	6.7	11.6	9.5	8.4	10.4
ACADEMIC STAFF . WHOLLY UNITERSITY FURDED	491	478	472	388	351	339
STARE STULETT RATIO F.T. STAFE/F.T. STUDENTS	1:9.3	1:9.5	1:9.2	1:10.7	1:10.9	1:10.5
PULLICATIONS AVERA 15 PER MEMBER OF STAFF	1:22	1:28	1:23	1:52	1:65	2:12
EFCUTELEUT INCOME (EIG UNG GEAUT & HOME PEES) % OF TOTAL	16%	16%	20%	29%	34%	39%
		-				

ANALYSTS OF INCOME BY SOURCE

UNIVERSITY OF SALFORD, SALFORD UNIVERSITY INDUSTRIAL CENTRE LIMITED AND SALFORD CIVIL FACINEFRING LIMITED

YEAR TO 31 JULY

1985
000.3
13,250
15,003 (61)

81)

1,110 120 187

55

1/

315

1,175 21,461 80 2,964 3,417 1,53 (100) (20)20,624 1,346 214 625 114 13 7,86 3,688 1,174 (29)(100) 23,280 1,701 6,693 1,798 1,30 55 6,187 506 (34) 23,945 (100) 1,732 110 2,767 163 8,198 7,735 24,687 (100) (38)3,016 8/12 01/ 2,901 9,034 650 9,684 Interest on Short Term Investments Total Income from Outside Sources Company Income (SUIC Ltd) (SCEL) Self-Supporting Students' Pees Research Grants and Contracts Self-Financing Courses Consultancies Total Income Other

3 october 1985

(91)

2,833

(91)

(100)

7,915

(100)

Source: Deputy Registrar (Financial)

Salford has always strived to be a Technological Applied University, it is doubtful whether these innovations would have occurred and certainly not in such a short time.

Another factor which has contributed to the successful way in which Salford responded to the cuts is the charisma and leadership style of the V-C. Described as Salford's 'ebullient and hyperactive vice chancellor' Professor Ashworth seems to have been the main source of inspiration to his staff in facing up to and overcoming the problems created by the U.G.C. cuts. He was appointed pre July 1981 and took up his post in September. The fact that he ignored well intentioned advice to withdraw, is perhaps the main reason for the tremendous loyalty he enjoys among his staff 12

Salford has consistently and, it hopes, successfully argued that there should be an acknowledged diversity in the university system. It hopes that the U.G.C. will now recognize that the judgement it makes about individual universities should no longer draw their validity from a single set of criteria hierarchically ordered to which all universities must correspond. Diversity of activity, of direction and emphasis should be publicly acknowledged and the criteria for judgement of success debated.

Since the 1981 Academic Plan the University of Salford has opted to continue, expand and emphasize its policy to be a technological university of the highest order. The

extent of its future funding and success will depend on how far the U.G.C. will accept the principle of diversity in activity, direction and emphasis.

Late in 1984 the U.G.C. awarded Salford, (with Aston) a special grant of £250,000 in recognition of its 'impressive response' to the cuts. Writing in the Times in September 1985 Sir Edward Parkes who was Chairman of the U.G.C. when Salford was cut, wrote that

"Salford is very different from what it was five years ago, as a result of the cuts and partly as a result of vigorous direction has new dynamic departments and a bright future" 13.

Finally, Sir Keith Joseph, the then Minister of State for Education called Salford a university which is 'a blueprint for higher education' 14.

Maybe such an accolade of praise, for its resilience and achievements means that the future of the University of Salford will be brighter than it was five years ago.

The University of Malta

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Chapter 14

The University of Malta 1980-85

14.1 Introduction

In the United Kingdom there were in 1983, 566 institutions of Higher Education. Of these 53 were universities and 31 polytechnics. In our four case studies of English Universites we have limited our analyses to the overall changes and adaptations made by these universities in response to both external and, in some cases, internal pressures. We have used Chapters 6 and 7 to describe the overall internal framework and the general external policies within which U.K. universities operated in the period 1980-85.

As we have seen in Chapter 8 the situation in Malta is completely different in that as from March 1980 there has been Malta's only one institution of higher education - The University of Malta.

There are other features in which the Malta study differs from the U.K. cases. In Malta facilities and resources were available to carry out a survey through Questionnaire amongst all members of the Academic Staff

and this was followed by Structured Interviews with approximately fifty per cent of the Academic Staff.

Another feature of the Malta case study is that the writer has been involved with Higher Education in Malta for the past twenty years and was directly involved in various capacities in the reforms and the changes which took place since the late seventies.

In view of these different features regarding the Malta situation it was felt that a different form of analysis might be more appropriate for the Malta Case Study.

In their studies of the Higher Education system in the U.K. Becher and Kogan² suggest that there are four elements in the structure of any Higher Education system.

- 1. The Central Level, comprising the various national authorities, who are charged with the overall planning, resource allocation and the monitoring of standards; these may also ensure that social and economic desiderata are met.
- 2. The Individual Institutions, as defined by the law, maintaining due academic process initiating developments in conformity to central demands, development of organisational forms.
- 3. The Basic unit, whose main function is maintaining peer group norms and values. Conformity with institutional requirements, development of course provision, curriculum and research program.
- 4. The Individual, teaching staff, researchers and students. Here personal wants and expectations are intrinsic in job satisfaction. Subscription to group norms and development of working practice are in evidence. Main operational areas are research, teaching and scholarship.

FIGURE 14.1

The Structural Components of the Model

CENTRAL AUTHORITY INSTITUTION BASIC UNIT INDIVIDUAL

14.2 The Central Authority

The Maltese Socialist government which was returned to a second term of office in 1976 was determined to introduce changes into the Maltese Higher Education system in spite of being advised by experts to the contrary, and of the wide condemnation at the way in which the reforms were introduced. The reasons for introducing these reforms were cultural, economic and ideological.

The Dahrendorf Commission³ (1973) had submitted that the university has to start measuring academic achievements not only in terms of notions of excellence but also in terms of the relevance of its efforts to the country's needs. It was the Government's argument that the resources of the University were not being used efficiently because it was turning out graduates of whom there was already an over supply in the market, for example doctors, lawyers and priests. On the other hand it was not doing enough in suppling the country with trained personnel in engineering,

management and similar skills.

Since the late fifties efforts were made to change the Island's economy from one depending on defence spending to one depending on industry, commerce and tourism. It was the Government's contention that the worker student system would facilitate the education and training of the personnel needed to meet the country's manpower needs.

Another argument put forward by the Government was that the worker student would have a guaranteed job after graduating and the situation in which hundreds of graduates would remain unemployed or have to take jobs below their University training would thus be avoided.

University education had been free for over a decade, but students had to rely completely on their parents for all their living and studies expenditure during their years at University. Since the Socialists' return to power there was an increasing demand for students grants during their University studies.

In the Debate on the Education Act 1978⁴ the Prime Minister stated

[&]quot;We want to introduce two great reforms in tertiary education: first, we must make institutions offer those subjects and award those degrees which are useful to the nation; second, we want to create a

system which will give everybody the chance to go there. The myth that the (old) university was open to all classes must die once and for all. This Republic is based on work. And we are telling the student. 'We are giving you the chance to work. And for working we shall give you a guaranteed sum of £1000 per year. In return you shall spend six months out of twelve as a student. We cannot hand out the £1000 by way of grants. We are doing only what is practicable in the circumstances of our island".

So the worker students were to earn their living during the six months at work. It was their employer who was paying them and who would decide what work they did.

Relevance of work to their study was not to be an issue.

In its Report on the Evaluation of the Worker-Student Scheme (1985)⁵ the Special Committee set up to evaluate the scheme stated that

"Exposure to work early in life has proved to be a useful experience and financial independence is an asset for the student".

In creating the Worker Student Scheme the Government could decide what courses should be provided according to its perceptions of what the country needed, for example accountancy, management and engineering. When the worker student scheme was introduced there was no provision for the awards of postgraduate degrees and neither was there any provision made for research.

In the debate 6, introducing the Reforms the Prime

Minister stated,

"We in Malta cannot undertake much pure research; we have not the means. But we are trying to make good this deficiency by reaching some sort of agreement with other European countries, whereby we can have access to their own research. Whatever we undertake here cannot be done haphazardly, it must have some sort of utility value to the community. The University was to make full use of the cultural agreements entered into by the Government with other countries; establish contacts with their universities and make use of their research findings where applicable".

It was the aim of the Reforms to effect a re-orientation of university research from the classical patterns of independent individual research carried out on a fragmented basis towards planned and integrated applied research.

"Such research aims to identify and solve national problems. It seeks to adapt practical results and techniques already developed in specialized research institutions overseas and to adapt them to local conditions"?.

We have examined some of the main arguments put forward by the Government in introducing the worker student scheme. We have also looked at the mainly unfavourable reaction to the scheme when it was introduced. Later on in this Chapter we shall be examining the main criticism of the scheme from the point of view of the academic staff. Yet in spite of all this criticism the scheme is proceeding. It is in its ninth year of operation and during this period over 2,400 worker students have been enrolled on the dozen degree

courses offered under the scheme. Over five hundred students have qualified in the various degree courses and a number of students from every Faculty have gone abroad to continue their studies and research in postgraduate work. Students obtaining a first or an upper second have had no difficulty in obtaining postgraduate places in a University abroad.

It is the object of this case study to seek out and analyse the various factors which have contributed to the relatively successful implementation of the worker student scheme, inspite of the many predictions of failure and doom even from informed sources.

The Maltese Socialist Government was prepared to go to great extremes to introduce the Worker Student Scheme. The setting up of a second university was to ensure that the reforms were introduced. The first important step by the Government in trying to normalise the system after the furore surrounding the 1978 legislation was to revert back to one University. As long as the Old University remained in existence as a separate entity there were still those who hoped for a return to the old status quo but with the passing of the 1980 Amendment to the Education Act⁸ and the Socialists' return to power in 1981 the worker student scheme was clearly here to stay.

Another important adjustment was in relation to the

work period. The initial concept that the work period was to be non academic was played down and eventually abandoned. The idea that work should be relevant and where possible related to academic studies is now actively promoted.

It is perhaps because in its original conception the worker student scheme looked at the work phase as being divorced from the academic phase that the Committee evaluating the scheme criticized the work component of the scheme. The majority of work assignments were not being regarded as a learning experience and correlation between work and study was inadequate. It also suggested that the educational aspect of work assignments should devolve to the University.

One of the main criticisms of the worker student scheme as it was formulated and introduced was the rigidity of the six months study for all faculties without taking into consideration special requirements of different degrees. In a study carried out among accountancy firms in the late seventies, the writer found that many were prepared to release employees and sponsor students for a day or a day and a half or a week for the five year professional/degree accountancy course but it was extremely difficult for a professional accountancy firms to release workers for a six months stretch especially during the first six months of the year. As a consequence, the scheme, as introduced, has

had until recently hardly any sponsorshop from professional accountancy firms.

Similar problems caused by the rigid six months work/ six months study system have been encountered in most of the degree programmes.

It has recently been announced that in at least two degree programmes, that of the B.Ed (Hons) and B.Pharm adjustments away from a rigid six months pattern will be made between the work phase and the study phase.

Until 1985 students spent five years on the B.Ed and four years on the B.Pharm alternating between study and work every six months.

In the B.Ed, the new system introduced in February 1986 will work broadly as follows:

First six months Work Period
Next two years , Study Period
One year Work Period
One Year Study Period
Final six months Work Period

In the B.Pharm the new system will eight months study and four months work each year of the four year programme, instead of the six months work and six months study. In the years of the operation of the scheme, the government through the appointment of a Rector from abroad excercised a great deal of control on the affairs of the University. As time passed and the scheme became more accepted and recognised, centralised control was relaxed. An important step in this direction was in the Summer of 1982 when the services of the foreign rector were terminated and a leading Maltese academic with many years of experience in higher education was appointed as Rector. Since then the process of adaptation and change has continued at a steady pace.

These examples have demonstrated that in spite of th initial rigidity on the part of the Central Authority, flexibilities and improvements are slowly being introduced into the system which are clearly to the overall benefit of Malta's Higher Education System

14.3 The Institution

The academic institution is the principal entity through which most functions in higher education are performed. It is that body by which a group of basic units are authoriatively held together. In Malta there is only such institution that is, The University of Malta.

Kogan & Becher (1983) 10 argue that there are two principal versions of how institutions work: The first one is that institutions respond as unities to the leadership, if not the management, of a vice-chancellor or rector. The second version rests on a denial of such internal authority as does exist. It represents the institution as being collegial.

Alongside the dual structure of hierarchy and collegium academic institutions contain systems of executive roles and systems of committees. They seldom resolve the overlaps and conflicts between them in any logical way. The relative emphasis between hierarchy and colegium changes overtime and varies between types of institution. Before the 1978 Reforms The University of Malta leaned more towards the collegeiate type in which members had relatively equal authority to participate in decisions which were binding upon them. was discretion for individuals to perform autonomously, subject only to minimal controls. Since the introduction of the worker/student scheme the University has operated more in terms of a hierachical system with direct planning and control by the government, through the Minister of Education, to the various authorities of the University, Council, Senate, or directly through the Rector. In the last few years there has been a slow but perceptible shift from direct and rigid control to more involvement and participation, a movement from the hierachical to the collegial type.

We shall now examine some of the main developments at The University of Malta since 1980. The twelve degree programmes organized on the Worker/Student Scheme are the primary activity of the University. Since 1979 over 2400 students have been admitted on the various programmes and by 1985, over 500 students had graduated on these courses. Details of student admissions (1979-85) are shown in Table 14.1. This Table also shows the number of students sponsored by private industry. The Central Authorities hoped that as the scheme got established and gained more acceptance more sponsorship of students by private industry would be forthcoming especially in the fields of Engineering and Management. It can be seen from the above figures that this has not taken place. Table 14.2 shows the number of students graduating since 1982.

One of the main preoccupations of the University has been the maintaining of standards and the recognition of the new degree programmes operated on the worker/student scheme. In all degree programmes foreign external examiners are appointed. These are usually academics with wide reputation in their field of study coming from well known and established institutions. Their role is usually much wider than that of assessing students performance, and they often act as consultants and advisors on the development of the degree programmes. The system of external examiners has been an important factor in the maintenance of standards and obtaining external recognition. A list of external examiners for 1985

TABLE 14.1

THE UNIVERSITY OF MALTA

Number of Worker-Students at Entry: 1979-85

			NUMBI	ER OF I	WORKER-	-STUDE	NTS	
COURSES	1979	1980	1931	1982	1983	1984	1985	TOTAL
			50					
Education	92	46	56	64	83	90	50	481
Eng. & Arch.	19	17	30	27	15	-	15	123
Elec. Eng.	12	10	18	23	26	28	12	129
Mech. Eng.	27	7	23	10	25	20	16	128
Accountancy	30	29	27	31	33	25	30	205
Bus. Mangt.	25	12	21	22	26	26	30	162
Public Adm.	32	23	16	13	23	36	30	175
Law	13	-	32	-	59	-	10	114
Med. & Surg.	102	58	55	76	36	35	35	397
Pharmacy	32	-	-	42 .	-	42	-	116
Dental Surg.	. 8	-	12	-	18	-	8	46
TOTAL	392	204 -	290	308	344	302	236	2076
PRIVATE SPONSORED STUDENTS.	117	5	50	52	41	18	3	286
STUDENTS.	117	5	50	52	41	18	3	

Source: Students' Selection Board Reports.

TABLE 14.2

THE UNIVERSITY OF MALTA UNIVERSITY GRADUATES

1982 - 1985

DEGREES	1	982	19	983	19	984	19	985	TO	TAL	TOT
DEGREES	М	F	М	F	М	F	М	F	М	F	TOTAL
B. Pharm M.D.	22	- 1	-	-	67	16	42	16	131	33	164
N.P. LL.D	44	5	-	-	42	6	33	9	33 86	9	42 98
B. Elec. Eng. B. Mech. Eng. B.E. &. A.	:	-	5 17 5	2 -	:	-	7 7 16	3 -	12 24 21	5 - 1	17 24 22
B.Ch.D	1	-	-	-	-	1	8	1	9	2	11
B.Ed P.G.C.E.	47 15	36 10	=	-	-	1 -	10	11	57 15	48 10	105 25
B.A. Accounts B.A. Bus. Mangt. B.A. Public Admin	-	-	17 16 18	2 - 1	-	-	23 11 11	1 1 3	40 27 29	3 1 4	43 28 33
B.A. (Gen) M.A.	88	30 1	-	-	- 1	-	-4	-	88 7	30	118
B.Sc.	2	-	-	-	-	-	-	-	2	-	2
M. Phil	1	-	-	-	-	-	-	-	1	(=	1
TOTAL	228	83	7 8	5	110	24	172	47	582	159	741

In 1982, only the B. Ed graduates were student workers - the rest were graduates phased out on the previous system.

Source: The University of Malta 'Order of Cermony' Booklet for Graduation Ceremonies 1981, 1983, 1984, 1985.

is shown in Appendix D.

It has been increasingly recognised by the administration of the University that the foremost commitment of the University is the teaching function. How effectively this requirement is fulfilled is reflected in the standards obtained. With this objective in mind the University engaged the services of the Centre for Staff Development in Higher Education of the University of London. Since September 1984 staff training specialists have been brought to the University to run seminars for academic members of staff, and to date some 80% of staff members of staff have participated in these seminars.

Another important development has been the extension of University activities to the evenings, a transition from educating solely full time students to educating the community. The University of Malta has recognized

"the increasing demand for wider access and continuing education and meeting this challenge is the basis of a strategy for higher education into the 1990's" 11.

Since 1982 evening diploma courses have been introduced in Languages, Law and Administration, Mathematics Computing and Logic, Mediterranean Studies, Philosophy, Journalism, Accounting and Law, Social Studies and Communication Studies. In many cases these lead to a Higher Diploma and eventually to a degree.

Besides meeting the challenge of wider access and continuing education, the University through this initiative, has been instrumental in relieving the problem of qualified students who could not get on the regular degree programmes through lack of sponsorship.

Another development which has taken place is the increasing use of university staff as consultants and advisors to Government, parastatal and private industry. With the adjustment in teaching loads taking place through the changes recently introduced there is greater scope and opportunity for such contacts to increase.

In the British case studies we had the opportunity to examine the important role played by the vice-chancellor. He was usually the main actor in managing the changes which were required to make the institution more responsive to the increasing, changing and sometimes conflicting demands made upon it.

The vice-chancellor has dual expectations placed upon him. He is responsible for making sure that the institution sustains itself and where possible develops. He must lead and mediate among strongly idosynaratic academics whose pre eminence in their own professional spheres is likely to be among the institutions most important assets.

Since the 1978 Reforms The University of Malta has had

two rectors. The first rector held the post during the upheavels of the changes, the introduction of the reforms, and the general acceptance of the worker student scheme as the main mode of teaching of the University. During this period the main objectives was the establishment of the scheme more or less as formulated and directed by the Central Authority. Having implemented the scheme the next pressing need was to ensure that the University sustains itself and develops new fields. Since 1982 there has been a new rector, who besides being Maltese, is also a leading academic in his own right with many years experience of higher education both in Malta and overseas. Through his drive, leadership and initiative the university has moved further on the road to closer affinity to many organizations of higher learning and educational organizations abroad.

The changes which took place in Malta's higher education system during the past decade could be considered in the context of Lewins Change Theory 12.

Lewin 13 describes changes as a three step procedure of unfreezing, moving and refreezing the organization. The unfreezing process usually means reducing the forces keeping the organization at its present level, L_1 . Unfreezing was accomplished by running down the 'old' university and getting rid of its Maltese rector. Next, the organization is moved to a new level, L_2 . This involved the setting up of the New University, the appointment of

ex polytechnic staff and a foreign rector to implement the changes as prescribed by the Central Authority. The Third step in the change process, refreezing, involves stabilizing the change to a new "quasi stationary equilibrium" through the use of supporting mechanisms. This was done by reverting back to one University rerecruitment of old university staff and the appointment of a Maltese rector.

Strong institutions are those which adapt to, rather than keep aloof from, the external environment. They take on and are able to face challenges, both intellectual and social from the outside. At the same time, their internal systems must be sufficiently flexible, through their use of hierarchical and collegial forms, to reach consensus on those questions of purpose and function which make the institution coherent and reliable in its external relationships. The institution must thus stand firmly on its own range of values but exhibit previousness to the outside world. In spite of the upheavals it has gone through and the constraints place upon it one can say that The University of Malta has not only adapted and survived, but is slowly regaining its status and reputation with the outside world.

14.4 The Basic Unit

The basic unit would usually be taken as the individual subject department. Recent institutions have developed

alternative structures in which constituent elements are more broadly schools of study, course teams, etc. At present the University of Malta is organised into six faculties. There are twelve degree programmes at the University and these are grouped within the six faculties as follows:

Faculty of Dental Surgery

Bachelor of Dental Surgery (Honours) 4 years

Faculty of Education

Bachelor of Education (Honours) 5 years

Faculty of Engineering and Architecture

Bachelor of Engineering and Architecture
(Honours) 7 years

Bachelor of Electrical Engineering
(Honours) 5 years

Eachelor of Mechanical Engineering
(Honours) 5 years

Faculty of Laws

Doctor of Laws (L.L.D.) 6 years

Faculty of Management Studies

Bachelor of Arts (Honours) in Accountancy 5 years

Bachelor of Arts (Honours) in Business Management

5 years

Bachelor of Arts (Honours) in Public Administration

5 years

Faculty of Medicine and Surgery

Doctor of Medicine (M.D.)

5 years

Bachelor of Pharmacy (Honours)

4 years

. Bachelor of Pharaceutical Technology (Honours) 4 years

It is usually accepted that the work undertaken in basic units includes research, which is the pursuit of new knowledge, technology or professional study, which refers to the application of existing knowledge to practical purposes, and finally scholarship to designate the critical appraisal of the corpus of existing material in any given field. These roles are not fixed and unchangeable; the careers of individual academics may shift between different roles at different stages. Even so, the terms can usefully serve to mark the distinction between impirical quest for new data, the pragmatic translation of theory into practice and the predominantly analytic and reflective recording of existing knowledge.

When the Worker Student Scheme was set up it was clear from the start that very little basic or pure research would be undertaken. In view of the initial separation of the work phase from the study phase little practical research was possible. This imbalance has to a certain extent been

adjusted by a number of factors: the increasing rerecruitment of old university academics mostly with doctorate
degrees and a certain amount of research background the
efforts by the University to send staff abroad to read and
research for higher degrees; and the increasing emphasis
on the relationship between the work phase and the study
phase. The Dissertation Project which the students usually
do in the last two years of their course gives ample
opportunity for involving students and members of staff in
action research programmes within industrial and commercial
organizations.

We shall now examine very briefly how the various faculties adapted to the reforms. As we have seen three of these faculties, Laws, Medicine and Surgery, and Dental Surgery were an integral part of the old university and their degree programmes were internationally recognised. In the case of Laws the main problem was to re-organize the course to fit the worker student scheme; eventually it was decided to extend the Law course to six years.

The Faculty of Medicire and Surgery and the Faculty of Dental Surgery have perhaps undergone the most traumatic experience in the whole reform process. This was mainly due to an industrial dispute between the Government and the Malta Medical Association which broke out in 1977 and to date has not been resolved. One of the consequences of this industrial action was that these two faculties were left practically depleted of teaching staff and they had

to start from scratch with a small nucleus of local staff but mainly with the help of imported foreign doctors.

By 1985, one hundred and sixty four doctors had graduated from the Faculty of Medicine and Surgery and eleven dentists from the Faculty of Dental Surgery.

The courses run by the Faculty of Engineering and Architecture were to a certain extent already being run either by the University or the Polytechnic. What had to be done was to update the curriculum and fit the programme into the six months study six months work scheme. The Electrical and Mechanical Engineering degrees were extended from three to five years and the degree in Civil Engineering and Architecture to seven years. Up to 1985, sixty students had graduated with various engineering degrees from this faculty.

The Faculty of Education has had the least turbulent changeover to the worker student scheme. Teacher training has been fully established in Malta since the early fifties and the Teachers Certificate was issued in conjunction with the University of London's Institute of Education

For nearly thirty years external examiners have acted as consultants and advisors on the development of teacher training in Malta. When the Department of Educational Studies became the Faculty of Education to run the B.Ed,

this was a challenge which the staff of this department were fully equipped to accept and meet successfully.

Practical experience has always formed an integral part of a teacher's training programme. So it was not too difficult to adapt the degree programme to the worker student scheme.

The Faculty of Management Studies was different from the rest. Previously, as the Department of Business Studies its main activities centred round courses for professional bodies for example Accountants, Bankers, etc. both in Malta and abroad. Thus there was less need to bring external examiners to assess and advise on these courses.

In the setting up of the Faculty of Management Studies the original ten members staff were to start running three degrees courses which were being offered in Malta for the first time. Accountancy, Business Management and Public Administration. Each of these degrees is of five years duration and the first two years are common for the three degrees. Though most of the members of staff had professional qualifications and practical experience, they were limited in Academic qualifications and research background. An intensive programme of staff training has taken place whereby all members of staff have been given the opportunity of going abroad to gain higher academic qualifications. At the same time new members of staff mostly

with doctorate qualifications have been recruited.

Another important factor which helped this Faculty to introduce these course successfully was the provision of a Fulbright Scholar, from the United States, every year since 1978. There is no doubt that the guidance and expertise provided by these scholars was an important input in helping to set up this Faculty on a sound footing. Starting as the newest and youngest Faculty it has become the largest in student numbers and, once better liaison and understanding are established with the industrial and commercial community, it is expected to play an important role in Malta's continued economic development.

The degrees of the Faculty are assessed and monitored by examiners from overseas and some of its graduates are already doing post graduate studies in Universities abroad.

Thus each of the six Faculties of The University of Malta responded in its own way to demands which were made upon it. One very interesting aspect was the ways in which the various Faculties established contacts and relations with similar Faculties abroad. This is the idea of 'the invisible college'. It illustrates Gouldner's 14 idea that university members are 'cosmopolitans'.

14.5 The Individual

When the worker student scheme was introduced in 1978 most of the academic staff who were expected to operate it came from the ex Polytechnic. For many years academic staff at the Polytechnic had hoped that there would be increasing cooperation between the University of Malta and the Polytechnic, with the eventual amalgamation of the two institutions.

In spite the fact that the level of work carried out by the two institutions was the same in many departments, there was an appreciable difference between the working conditions in the two institutions. At the University, academic staff had a relative amount of freedom and discretion, opportunites for training and research were available. Polytechnic staff, being Government employees, had very little freedom of action and discretion and opportunities for scholarship and research were very limited. order to become members of the New University the staff of the Polytechnic had to resign their post from the Government, a post which offered security of tenure. The staff were offered a completly new package of working conditions, in which, taking everything into consideration, the advantages and disadvantages were balanced. The main outstanding problem was that of tenure. After protracted negotiations on this issue an agreement was reached and a clause on tenure was incorporated in the Education Act 15. This clause

was to apply to ex Polytechnic staff who joined the new University. Having secured this concession the ex staff of the Polytechnic set out on the most demanding and challenging task of changing the Polytechnic into a University.

There are a number of factors which limit the scope of what the individual can do, namely, the group norms which map out an acceptable range of professional beliefs and expected style of conduct, for those at different levels of seniority, as well as formal administrative and political controls.

The staff of the new university had varying views on the scheme as it was introduced and there was very little initially they could do about it. On the other hand they had a degree of academic freedom in aspects of teaching, curriculum, assessments and students practical research.

Managerial attempts to modify the current operational patterns of institutions, departments or individuals alter the established distribution of power in unforseen ways and give rise to a series of unpredicted side effects.

In the context of Maltese higher education the distribution of power moved from the staff of the old university to the staff of the new university because the former, for a number of ideological, cultural and social reasons could not accept change and adapt to the reforms which were being introduced.

To the staff of the ex Polytechnic, despite their reservations about the scheme and the way in which it was introduced, the setting up of the New University was both an opportunity and a challenge. For many years they were doing professional and degree work which was more or less the same standard as that being done at the University. Yet they were considered as second class citizens in the higher educational set up. So in spite of the reservations and the constraints imposed by the rigidity of the system they were determined to attain the highest possible academic standards and to prove that they were capable of running undergraduate courses of acceptable international standards.

The relative success of the academic staff in maintaining academic standards was enhanced by the return of a substaintial number of academics of the 'old' university. This, and the appointment of new staff having the highest possible qualifications have been important factors ensuring that academic standards are maintained. Since the introduction of the Scheme the number of academic staff has adoubled and it is now 120 full time staff. This is roughly equally divided into three groups, ex Polytechnic staff, ex University staff and new appointments.

During July 1984 a Survey, through Questionnaires and

Structured Interviews was carried out amongst members of the Academic Staff.

The main objectives of this survey was to try and assess the feelings, views and reactions of the academic staff in relation to the working of the Worker/Student Scheme after it had been in operation for six years.

The Questionnaire was sent to 125 Members of Staff.

A copy of the Questionnaire is shown in Appendix B.

		Questionnaires	Replies
Faculty of	Education		
	Engineering & Architecture		
	Laws	100	95
	Management Studies		
Faculty of	Dental Surgery Medicine & Surgery	25	10

The result of the survey showed that there was a general agreement amongst members of staff on the following:-

- 1. The principle of work experience in all courses is a good one.
- 2. Some type of remuneration for students is a good thing.
- 3. The introduction of new disciplines is a positive step, professional needs of society are better catered for.
- 4. Academic standards generally have been maintained.

- 5. Scheme implemented with relative success and is working.
- 6. Scheme should be trimmed and pruned in light of experience. With wise change and greater flexibility it can provide Malta with a unique system that could be truly beneficial.

According to most members of staff there is room for improvement. Sixty per cent of staff made various criticism and suggestions regarding the scheme as implemented and as it was being operated. The criticism/suggestions are grouped under five headings.

- 14.5.1 General
- 14.5.2 Introduction of the Scheme
- 14.5.3 The Academic Staff
- 14.5.4 The Study Phase
- 14.5.5 The Work Phase

14.5.1 General

The rigidity of the six months study six months work introduced uniformly for all faculties. Different faculties have different needs but the system was considered to be too inflexible to adapt to these needs. The system does not allow adequate time for study or for research. The system has not introduced a greater social mix from working class back ground. The appointment of a foreign rector, who was completely unfamiliar with the local educational scene, was a mistake. Faculties cannot plan intake of students since

these depend on availability of sponsors. The system could deny qualified students the right to university education if no sponsor was available.

Students inclinations are often ignored because they join courses out of necessity and not out of choice.

14.5.2 Introduction of the System

The system was introduced hurriedly without sufficient planning. The advice of experts was ignored and challenged. Members of staff were not really consulted; with proper staff participation changes identified as desirable would have stood a better chance of being introduced realistically and effectively. No consultation with private sector employers was carried out with the result that lack of private sponsorship has been quite conspicious. Employers present and future should be consulted if they are to cooperate.

14.5.3 Academic Staff

Repeating the courses twice a year has a detrimental effect on staff motivation and morale. Repetition of courses has led to perfunctory routine approach to teaching and stifled incentive to break fresh ground. This could have serious impact on standards. Lecturing loads leave no time for scholarship and research. To do any research work over and above other duties is possible only in the

short term. There is little or no contact with students on the work phase.

14.5.4 Study Phase

The stop-go nature of the Scheme is not conducive to continuity of academic development in the student; in fact it stalls, hinders and retards accumulation of knowledge. The study period is too short with a continuous cramming to pass exams, tests, assessments. Students are more concerned in absorbing chunks of information, and then reproducing these in examinations. Students have no time to read for their degree. They also have insufficient time for careful assimilation of information, reading around the subject and forming their own critical opinion. Assimilation, depth and critical reflection need longer study periods. Students life and extramural activities are hindered.

14.5.5 Work Phase

The work phase is relatively too long compared with the study phase. Very often the work is completely un-related or remotely related to the students' field of study. Students very often are considered as full time employees rather than trainees. Sponsors very often are interested in getting work and not in the educational development of students. Student workers often_learn bad habits from unqualified supervisors. Students could be exploited and

used as cheap labour. The apparent 'independence' and job security of the student could stifle enterprise and initiative.

14.6 Conclusion

Our main conclusions from this survey relate mainly to the three new faculties, that of Engineering and Architecture, Education and Management Studies. This is because over 90 per cent of the returned Questionnaires were from these faculties and all the staff interviewed were also from these faculties. The results of our study show that by the Summer of 1984 there was a general acceptance of the Scheme and a genuine desire for its effective operation. The system has been implemented and has survived; now it needs to be strenghtened and made more effective.

The 'inadequate institutional commitment' to the Scheme which the Evaluation Committee 17 has listed in its Findings could perhaps be forthcoming if the recommendations, suggestions and constructive criticism of the academic staff are sought and seriously considered. It has been shown earlier in this Chapter, that since this Survey was undertaken more flexibility has been introduced into the system and certain fundamental changes have already been made to a number of degree programmes. Whether these changes were made in response to suggestions of the Academic Staff or

from other sources is not important. What matters is that they will improve the efficiency and effectiveness of The University of Malta, which is Malta's higher education system.

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Chapter 15 ·

Research Findings, Comparative Review and Conclusions

15.1 The Challenge of University Management

The orientation of this study has been managerial. We have been concerned with identifying and analysing those critical tasks which need to be performed effectively in order to sustain the vitality and efficiency of the institution, particularly in a period of rapid change.

It has been traditionally claimed that the fundamental purposes of universities of creating and transmitting know-ledge through teaching and research require a substantial degree of institutional independence. At the same time the functions of universities make them subject to legitimate public interest in their affairs and how they conduct them. They consume public funds and employ human and other resources; they produce educated manpower; they are ultimately servants to the society in their production of knowledge. Throughout their histories the universities have had to strike and maintain in their constitutional arrangements and their day-to-day management a balance between the two demands for independance on the one hand and for public accountability on the other. The period of steady growth

in higher education from the early 1960's was accomplished on the basis of significant governmental support and through internal processes which strongly encouraged the development of new projects and programmes. Consequently this led to a high proliferation of departments. As seen in Chapter 3, one description of Universities was that they are 'organized anarchies'. It seemed that 'organized anarchy' and expansion nourished each other, and decentralised, non dirigiste administration was the norm.

The expansionist and laissez-faire policies of the sixties gradually gave way to the contractionist and dirigiste policies of the seventies and the eighties. force of direction of external pressures on the universities stem ultimately from basic national economic factors. it could be argued that the universities have to share in financial hardships arising from overall economic performance just as they were once able to benefit from national prosperity; they are victims as well as beneficiaries of demographic trends; they operate in a world of changing social political and technological features, all of which influence their operation. The effects of the factors are complicated, since they interact and may contradict or reinforce each other. But changes in the factors may not only have direct effects on the universities, changing the resources available to them, the markets on which they depend and their operating practices, but also create or condition the views of external

bodies about the educational, social and economic function of the universities.

Contraction presents different issues from expansion. Problems are presented for resolution which have no precedent, and therefore, no validated or programmed solutions. Many existing policies and procedures are designed for bygone problems and to satisfy the needs of pressure groups which are no longer pertinent. The gaps between formal decision taking processes and informal patterns of organizational power and influence perceptibly grow wider. The balance of power and influence between organizational sub-unit changes with the redefinitions of problems and ground rules for resolving problems. The challenge is thus to develop administrative structures and processes which are relevant to the resolution of new problems and the resolution of the disequilibrum between these problems and yesterday's practices.

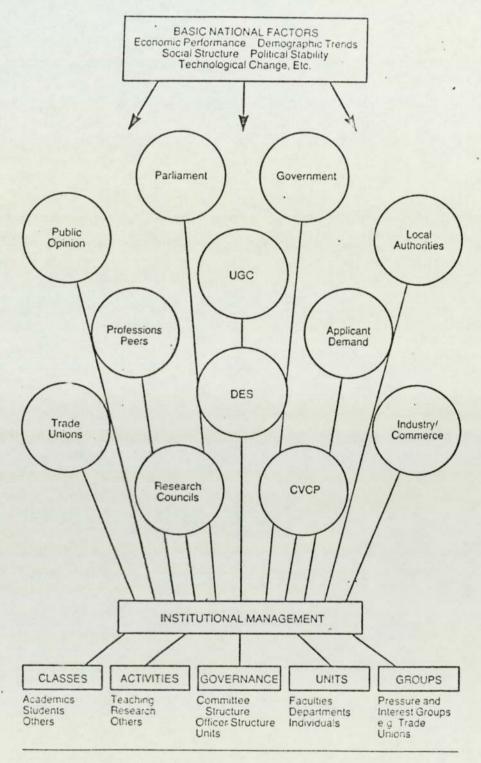
The era of contraction has brought numerous external pressures and exhortations on universities. It is asserted by various quarters that Universities need: to economize; to adapt to the needs of current society; to make their teaching and research more relevant to the requirements of the economy; to be more democratic in their government; to serve the local community; to concentrate upon the development of science and technology; to encourage creativity; to

have a closer relationship with industry; to educate people to live in the world of the twenty-first century; to take their responsibilities to the international worlds of trade and learning more seriously; and to be more positive in providing opportunities for the mature, the disadvantaged, etc. These, and many other often contradictory demands and assertions, are frequently made about the university. They are predominantly external in origin although each finds some degree of internal advocacy.

What the universities are facing is an external environment which is both complex and changing. There is a plethora of pressures stemming from national circumstances which are variously interrelated and a multitude of bodies through which these pressures are submitted to universities with differing propensities and capacities to affect the institutions. The pressures and bodies are not only interrelated and sometimes conflicting, they are usually difficult to predict; and their consequences are often unforseen and sometimes undesirable as well as unintended. Figure 15.1 shows the main External Bodies influencing Universities.

If we briefly examine the environment we can see some of the ways in which these factors affect and pose challenges to the universities.

The tightening of external controls especially through



External Bodies influencing Universities.

Source: Lockwood, G.A., Davies, J. (1985) Universities:
The Management Challenge. SRHE & NFER-NELSON. p.4.

financial constraints imposed by the Central authorities; this combined with the demographic challenge has led to the growth of uncertainity. Another challenge is the comparative loss of autonomy of the universities. As seen in Part 2 the last decade has been one of increasing external control on the use of university funds and of increasing direction in their allocation. Freedom to manoeuvre, while it still exists, is more limited now than at any time since Robbins. (Lockwood) 1985³.

Universities are being forced to become more efficient. They are being exhorted to maximize the use of facilities and make better use of staff time, to reduce their unit costs and improve student staff ratios. Universities have to face the challenge of the market. Another challenge is the impact of technological change, for example, the rapid growth of electronic technology in the past two decades is a major development requiring rethinking in many aspects of university education. In this environment another challenge for the universities is the creation and maintenance of flexibility. They need to be flexible in organization and activity and able to take decisions and implement them quickly. Perhaps the greatest challenge facing universities is to manage the changes required of them without excessive damage to the motivation and morale of their human resources. Already heavy demands are being made on university managers to maintain and develop human resources while at the same time coping with declining physical and financial resources.

In our case studies of the Universities of Aston, Bath, Keele and Salford in the U.K. and the University of Malta (Chapters 10-14) we have endeavoured to illustrate in some detail how these institutions have responded to these pressures, exhortations, and challenges. In this final chapter we shall make a comparative analysis of the main changes which took place in these five universities and attempt to identify those factors which seem to be prevelant to the management of universities in a period of rapid change.

One of the interesting features of our study is that in spite of the social, economic and political differences between the United Kingdom and Malta, the challenges which the University of Malta is facing are in general quite similar to those being faced by its U.K. counterparts.

Our case studies include three universities which were very heavily cut in July 1981, Salford 43%, Keele 32%, and Aston 31%, the University of Bath, which was let off rather lightly with only 4% cut and the University of Malta, where the Polytechnic was changed into the New University in 1978 and two years later was merged with what remained of the 'Old' University. What are the common factors or features which emerge from our studies, as the responses of these institutions to the challenges which faced them?

15.2 Research Findings

In this study we have dwelt on the nature of the University as an organization, firstly in theoretical terms then in general terms with regard to aspects of the organizational structure.

What emerges from our study of universities is a picture of limited manageability, particularly when the effects of the relationship with the external environment is taken into account. Earlier in this study we discussed the special characteristics which distinguish universities from other types of organisations, in particular, the internal fragmentation and high degree of autonomy of internal units. Thus the university is not like a firm, an integrated organization where, once a governing body or senior management have accepted the validity and priority of a demand, resources and people are allocated to it and are managed through hierarchical controls to ensure that they fulfil it.

The main findings of our study could be summarized as follows:

- 1. In order to cope with the increasing challenges which face them, institutions are becoming more managerially oriented and making greater use of modern management practices and techniques, such as, for example, strategic planning, decision making, evaluation.
- The personality and style of the academic leader is one
 of the most important variables determing the success
 or otherwise of the policies implemented by the institution.

- 3. In order to facilitate the decision making process, changes in the organization structure have taken place, mainly in the streamlining of the committee structure, there has also been a tendency for greater centralization.
- 4. Competition between institutions for students, research funds, etc, has greatly increased. At the same time there has been a tendency for greater collaboration between institutions particularly those located in the same area.
- 5. Institutions are becoming more responsive to environmental factors particularly through:
 - I greater efforts to increase efficiency in their operations
 - II increasing the provision of continuing and adult education
 - III increasing their relationship with industry.

We have seen earlier that universities have characteristics which distinguish them from other organizations, and to a certain extent limit their manageability.

In spite of these different characteristics, our studies, like a number of other studies Lockwood and Davies (1985)⁴, Keller (1983)⁵ Pfninster and Finklestein (1984)⁶, seem to indicate that universities as organizations are changing under the impact of financial austerity and the various other challenges discussed in this study, and they need to change and adapt more quickly to the environment, which means that the old days of organized anarchy and incrementalism are probably over and greater 'rationality' will have to characterize the operations of universities in the future. Our studies seem to indicate that universities could exist

as organized anarchies only for a limited period.

Legally the framework for management exists.

"Universities are organizations which have corporate responsibilities, and which possess power to manage the activities of their members in order to carry out those responsibilities. Members of the academic staff collectively constitute the major element in the government of a university, but individually they are employees by contract. Members of academic staff may be influenced by, and give their prime loyalty to, the national and sometimes international professional groups which cut across all universities. However, in terms of organization and management, the existence of the university creates a firm boundary. Faculties, colleges, departments and other units are not autonomous units within a guild structure, they are interdependent part of a unitary organization".

We will now examine our main findings with particular reference to our case studies.

15.2.1 Managerial Orientation of Institutions

According to some writers on Organization and Management the starting point of the managerial process in an organization is a statement of Objectives, Missions, Goals which the organization seeks to achieve. Whilst mission statements have been relatively commonplace in American universities for many years, British universities have been somewhat restrained in their enthusiasm. Nonetheless, in recent years there is some evidence of movement in the business of

clarifying objectives, beyond the broad statements of purpose contained in their charters. We have seen in our case studies the Vice-Chancellor outlining Keele's objectives' for the rest of the decade; Aston clarifying its objectives in the plan for the late 1980's; Bath's Planning Officer outlining the mission of his institution, and Salford going through the whole process of writing out the University's Aims and Objectives and having these approved by the Senate and Council. At the University of Malta the objectives of the new institution were set out in the White Paper preceeding the 1978 Education Act and clearly stated by the Prime Minister in the Debates in the House of Representatives 10.

A number of reasons could be advanced for the increased interest by British universities in clarifying their missions and objectives. The scale of financial reduction in many institutions (and three of our four cases had some of the deepest cuts) is such that all the multifarious activities of the past two decades cannot be sustained at the same level. Choices are thus inescapable; clarifying missions and goals gives rationality to these choices. There have also been requests from the UGC and other funding and sponsoring agencies for a much more detailed statement of purpose.

The study of institutional missions and goals is, on

the one hand, an uplifting exercise, but on the other hand a frustrating one. It is uplifting in the sense that it focuses attention on the purposes of the university's existence and encourages it to look to more distant horizons. The frustration derives from the sheer difficulty of achieving systematic linkages between mission aims and institutional efficiency, particularly since there seems to be no quantitative measurement to assess qualitative goals.

In spite of the above problems, the environmental imperatives remain and these have to be coped with by a whole series of steerage devices which reflect the plurality of the system, the mosaic of different goal levels and the desire, to retain differentiation and flexibility.

Davies (1985) 11.

Another management tool which is being increasingly used in universities is strategic planning. To a certain extent planning has always existed in universities, though it may not be recognized as such. Few developments occur by accident in universities in the sense that they are not necessarily institution - level decisions.

Planning exists in universities partly because owing to the nature of their activities they have greater need for foresight in decision taking than do many other institutions. The lead times involved in change are longer and

the effects of change take decades to reach society.

Lockwood (1985)¹² defines planning

"as the continuous and collective exercise of foresight in the integrated process of taking informed decisions affecting the future".

It is a definition of process rather than a plan. This definition is not dissimilar to that of Bennis 13.

"Whatever else planning may mean, it signifies anticipation of some future state of affairs and the confirmation of the vision of that future in the present in order to motivate, guide and direct present action".

It is not the scope of this study to examine the extent to which formal planning and related planning techniques were used in Universities until the seventies. What seems to be certain is that during the last decade much greater use has been made of these techniques. In our case studies we have seen how Keele prepared 'The Strategy for the Early Eighties' and Salford, 'University Planning to 1983/84 (1985/86)' and the various planning documents prepared at Aston by the Advisory Group on Budget Adjustment.

At the University of Bath the planning process has been seriously undertaken since the late 60's. A Planning Officer was appointed in the early 1970's. Our study of Bath shows that the relative success of that University could be partly

attributed to the effectiveness of its strategic planning.

By the end of 1985 each university in the U.K. was expected,
to complete and submit to the UGC its planning proposals
for the late 1980's.

At the University of Malta plans used to be formulated on a three year basis. With the introduction of the worker student scheme, the number of students depends on the sponsorships available, as this has not been consistent, planning is now generally undertaken on an annual basis.

The Faculty of Management Studies, which with its three degree programmes was really the only new faculty, formulated a five year development plan 14 in relation to its main areas of activities.

There are a number of advantages which could accrue when the planning process is undertaken efficiently and effectively. First, the correlating and manipulating of various sets of date and analyses from the operational offices using for example, student number, recurrent cost and capital cost projections to determine costs per student. In addition to this, using the results of such exercises to examine 'critical indicators' of efficiency; this work can be part of a system of in depth reviews of unit or departmental performance, such as have been used in Bath for a number of years and are increasingly being used at Aston,

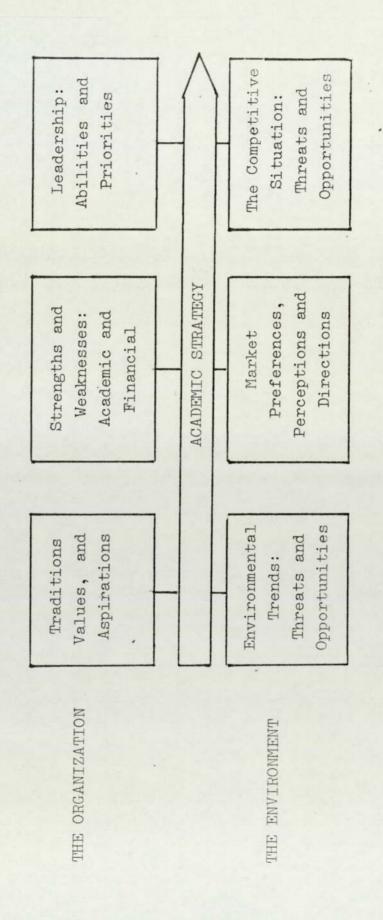
Salford and Keele. Secondly conducting analyses and development exercises which have been specially requested by planning bodies but which cut across operational divisions, for example, the examination of the feasibility of cooperating closely with another institution.

Thirdly, much of the information need for planning to be effective should be concerned with relationship with the external environment; intelligence on political policies and attitudes; trends in the admissions markets; international opportunities; etc. These external factors and changes can be inserted into the internal process.

Finally, evaluation is an integral part of the planning/control process. It is concerned with attempting to as-certain the effects of previous decisions.

The fundamental aim of strategic planning is one of linking forward the direction of the institution with the movement of the relevant forces in the environment; the two critical areas for analyses are the particular organization and the environment. You need to look inside and outside. In each of these searches there are three elements, as presented schematically in Figure 15.2

The Internal and External Elements of Academic Strategy



Adapted: Keller, G. Academic Strategy,

Baltimore: John Hopkins University Press.

Writing about higher education institutions in the USA Keller 15 stated that.

"Each of these institutions is groping towards an academic strategy - a clear sense of its education goals and objectives and better means of allocating resources in order to get there. Small institutions grope differently from large ones. Public colleges and universities move differently from private ones. Specialized colleges move differently from comprehensive ones."

We believe that this process is also starting to take place in Eritish universities. It certainly seems to be taking place in the universities which formed part of this study.

Many other examples could be quoted from our studies which indicate the trend towards more managerial orientation in British Universities. Reviewing Becher and Kogan's work on the process and structure of British Higher Education B.R. Clark (1984) 17 comments,

"The British University remains decidedly less managerial then the American, less influenced than the Swedish. Institutional autonomy has been high, collegial controls have been strong. But the efforts of the central government to contract the system may cause a change in the political alignments. The 'collegial mode' is placed under heavy strain; much more 'management' seems inevitable".

Since three of our four U.K. case studies are of ex Technological universities with strong links with industry and commerce, this trend towards more 'management' is likely to be even more predominant. According to Professor J. Quayle, Bath's vice-chancellor,

"When you are constantly in close contact with industry and commerce (as Bath is) you get the feeling that efficient management of resources is something of prime importance to a university as well".

15.2.2 Importance of Institutional Leadership

It is becoming nearly impossible to come across a paper, report or a book relating to university management, which does not emphasize the importance of institutional leadership. In his paper on better Management in colleges and universities Andrew H. Lupton (1980) 19 states that the most onerous task of Boards of Trustees is the selection of able presidents, (or vice-chancellors or rectors as the case may be). In the conclusion to their recent publication Lockwood G and Davies J state,

"Our view is that institutional leaders cannot now rely necessarily or exclusively on the good sense of the collegial processes to cope with the issues arising from a higher competitive higher education environment. It is senior institutional leadership which has to define problems and structure the context of possible solutions; to integrate different facets of policy making; to sharpen the competitive edge of the university; and ensure that processes and structures are continually evolving and adapting to the pressures placed upon them. The key point is thus that universities, and particularly their governing bodies should devote great care, imagination and

The paramount importance of institutional leadership is illustrated by our case studies. The universities of Salford and Aston were heavily cut in 1981. One of the reasons for the cuts put forward by the Chairman of the UGC is that both universities had moribund and out dated departments²¹. Today both universities "have been firmly designated as success stories" ²². "The success of these universities is to a great extent attributed to the vigorous direction and leadership shown by the new and able vice chancellors acquired just before the cuts" ²³.

At the university of Keele we have seen that the personality and style of the vice-chancellor did not match the hard and difficult decisions which had to be made in order to cope with the grave situation created by the cuts. Thus the measures which were taken were short term ones to overcome the immediate effect of the cuts. It is no wonder that in 1984 motivation and morale were quite low and members of staff remarked to the writer, 'If only we had an Ashworth or a Crawford'. The paramount importance of institutional leadership could be gauged by comparing the overall situation at Keele in 1984 to that existing a year after the coming of the new vice-chancellor. The effect of the new vice-chancellor with his dynamic personality and enthusiasm has been the most important factor in the gradual change of the

pessimistic and defeatist attitude that existed a year before. 'At least now, if we go down, we go down fighting' was the comment of one senior academic.

The University of Bath was one of the least affected by the cuts and there was no need for the surgical changes which took place at our other case studies, particularly at Aston and Salford. Our study seems to indicate that some complacency might have crept in at the University of Bath after the 1981 UGC Cuts. During 1985 the Long Term Planning Committee (LTPC) carried out a study of the track record of each School in attracting outside funding as compared with similar Schools/Departments in U.K. universities as a whole. This survey showed that in nine out of its fourteen schools Bath's performance was below the average U.K. performance.

This relatively poor showing seems to indicate that, even if there was no lowering of standards, Bath seems to have lost some ground to other universities. The various reasons why this might have happened are discussed in Chapter 11. We feel that one of the contributory factors to Bath's relative loss of ground was the fact that its Vice-Chancellor was leaving in 1983. Added to the favourable treatment meted out by the UGC there seemed to be neither the need nor the will to make difficult decisions, especially at Bath where great decentralization of power still existed within the Schools. The coming of the new

vice-chancellor at Bath and the changes which he is introducing is another illustration of the importance of vigorous and dynamic leadership.

The coming of the new rector at the University of Malta in July 1982 was again of paramount importance in the re-establishment of the University as an educational institution of acceptable international standards. It is true that there might have been other political and national considerations but we believe that the leadership and acumen shown by the new rector were a crucial factor in the University of Malta overcoming the crises and adapting relatively successfully to its new role.

This does not imply that the appointment of a new vicechancellor or rector would necessarily by itself improve the situation. There are likely to be many different factors which contribute to the overall situation.

In each of our case studies a new vice-chancellor or rector took office during the period covered by our research. At Aston in July 1980, at Salford in September 1981, at Malta in June 1982, at Bath in September 1983 and at Keele in May 1985. All we can say is that in each of our case studies the dynamism and vigorous leadership shown by the new vice-chancellor or rector have been an important contributory factor in the overall success of the respective university

in responding and adapting to the demands and challenges made upon it.

In view of the challenges facing universities what roles are being played by institutional leaders? First institutional leaders are, by nature of their roles, advocates for their institution. Though they may not all have the 'ebullient and hyperactive' character of Ashworth they can take opportunities public or private to fight for and defend their institution. Since institutions are consistently plagued by instability and uncertainity it is a leadership priority to lower or mitigate the amount and intensity of uncertainty.

Considerable entrepreneurial effort and business acumen is required to produce a sense of institutional initiative or master-of-our-destiny feeling in the institution, which take the form of consciously initiated and agreed priority settings, united stances against contraction pressures, and enhancing institutional independence. Davies (1985)²⁵.

As we have seen in our case studies, particularly Salford and Aston, there is a common tendency amongst institutional leaders to strive for rational and logical approaches to problems, supported by strong information bases, which are consistent with declared goals and philosophies. The major challenge for the leader is to develop educationally sound policies which are financially feasible and yet politically possible to generate and implement.

Our studies and experiences at these universities seem to indicate that when an organization is passing through a turbulent period, particularly as a result of external factors, the members of that organisation are more willing to accept tough and vigorous leadership which gives scope and direction to the organisation. They more readily accept hard and difficult decisions. They seem to prefer tough leadership and direction than no direction at all. Thus the people at Keele stated that they would have preferred a 'Crawford' to 'Harrison', in spite of the various stories they had read about the happenings at Aston. On the other hand they would have even more preferred an Ashworth since he seems to have introduced the required changes at Salford without the upheavals and human misery which seem to have occurred at Aston.

Institutional leadership can no longer be viewed solely as a maintenance function. The pressures are such that the role must be one of a 'manager of change' and the assumption underlying this assertion is that a proactive mode of operation is more appropriate than a reactive one. It is clear that the agendas for institutional leaders over the next decade are broad and complex. They will require different ways of looking at the university's role and how it functions as an organization. Considerable learning about these challenges and how they can be met has occurred over a very short period. Our case studies reflect the determination by institutional leaders to get things right

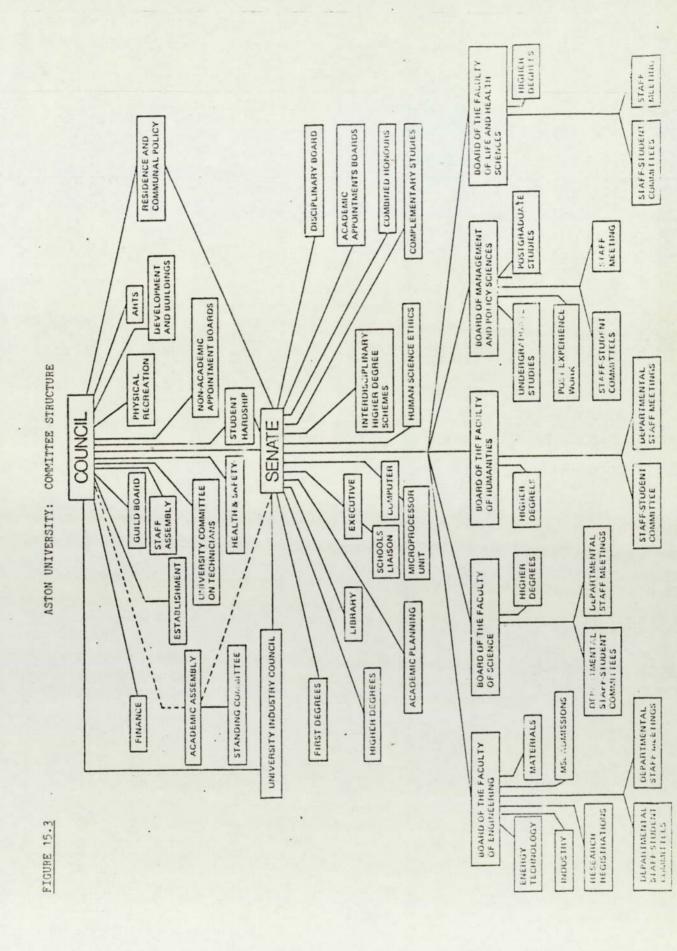
both in terms of the historical traditions of the university and of what is being required of it by external agencies.

15.2.3 Organization Structure - 'Chosen' Committee System

In Chapter 6 we examined the framework of the university system in Britian and we discussed the role played by the committee system in the governance of universities. In fact one can rightly conclude that the decision taking structures of universities are committee ridden.

It has been claimed, Lockwood (1985)²⁶ that the committee system in universities causes delay which in turn leads to decisions being taken outside the structure; it creates an environment where no decision however trivial can be taken without reference to a committee; it produces a structure so complex that few people can understand its intricacies; it enables the inefficient officer to shelter behind a committee and it shackles the initiative of the efficient officer. A number of criticisms have been levelled against the committee systems by the Jarratt Committee ²⁷. Figure 15.3 shows the committee structure at the university of Aston in 1983.

In order to retain the essential merits of the committee method, committee systems in universities need to be rationalized into one coherent structure and the number of committees



drastically reduced. This is what took place at Keele University.

The Jarratt 28 report stated that

"Even if universities have a clear view of what they want to do they will not be able to achieve their aims unless they have the necessary structure to effect adequate rates of change and the will to produce it".

One common area of concern is the question of centralisation of authority which seems to be the tendency in a period of contraction. Trow $(1975)^{29}$

Our case studies confirm, in general, the validity of this assumption, especially in the cases of Aston, Keele and Salford, where contraction was relatively greater than elsewhere. University Councils by virtue of their legal responsibilities, if nothing else, are necessarily more involved in personnel policies, and certainly take a much more active and direct role in financial decisions. There is also some evidence that they are more likely to be activated when Senate find themselves unable or unwilling to deliver policies concerned with reduction.

Central administrators (academic and non-academic)
have a more active role to play in periods of contraction
for various reasons. They are in possission of financial
information and controls; it is they who have responsibility

for activating university committees and proposing policies for the response of committees. It is natural, therefore, that a more intrusive dirigiste approach begins to emerge, and, in our cases we observed that this exercise of ostensible leadership by the vice chancellor and his senior colleagues was expected - even if in its detailed application it was resented.

At the University of Aston we saw the formation of the Advisory Group on Budget Adjustment. In the setting up and activities of this group for the next three years one could see the process of power and decision making moving away from the official organisational committee structure of the university and also the greater involvement of senior administrative staff in academic decision making.

At the University of Salford we saw the formation of two new informal committees whose membership included representatives from both Senate and Council (See Figure 13.3). These committees were mainly responsible for the formulation of The University of Salford Planning 1984/85 and its eventual implementation. They have now become a permanent feature of the structure of university government.

At the University of Keele a new committee structure was established for Senate in 1985 after the coming of the new vice-chancellor. The detailed business of Senate is

now dealt with by three major committees, nine Senate committees have disappeared. Later in 1985 the subcommittee structure of the Council was also reorganised. Only two council subcommittees remain. Other committees that formerly reported direct to Council became advisory groups under the Chairmanship of a Council nominee. Three Council nominees will also serve on the Planning and Resources Committee of Senate. The main aim of the new structure has been to increase the efficiency with which the university responded to external bodies.

At the University of Malta there were no appreciable changes in the committee structure. The changes which took place were mainly in the membership of the committees particularly at Faculty and Council. Employers representatives are now on the Faculty Boards and Council, the latter also include representatives from the Trade Unions. The aim of these changes is to ensure that the University of Malta is responsive to external demands, particularly in providing the right type of courses which are being demanded by Maltese industry and commerce.

In the case of Aston and Salford we have seen that even before the cuts were announced in July 1981 they had already embarked on a number of policies of saving money, such as freezing appointments. When the cuts were eventually announced they were so deep that there was not sufficient

time to initiate any comprehensive; consultative and peer based programme review based on consensus building.

Given the shorter time-frame and a more politicized environment, Salford, Aston and later on Keele none the less have used the small, carefully chosen committee appointed to examine institutional priorities as a mechanism to compensate for lack of time and consultation.

In times of contraction and impending staff reductions consensus is more difficult to achieve. The select committee mode of consensus building relies heavily on the credibility and legitimacy of its membership, particularly the personality and style of its chairman, usually the vice chancellor. The type of leadership required is not the old kind of giving orders, but one that decides on realistic objectives, devises shrewd strategies and long term goals towards which members of the firm can agree to work. Sizer (1982)³⁰.

15.2.4 More Competition - more collaboration

The various challenges facing the universities particularly the decrease in financial resources available to them and the changing student cleintele have combined to increase competition within higher education. Those academic leaders hoping to raise the quality of enterprise in the future have to adopt inventive and competitive tactics. We have seen how Aston appointed the firm of Image Consultants to devise a programme to boost up its image and public relations. There has been the creation of Campus at Salford in order to get support from leading figures in industry, commerce and the public service. Our case studies fully illustrate the proposition that if universities are to remain successful they have increasingly to employ inventive Marketing and Public Relations strategies.

In spite of the above, through the direct or indirect intervention of Central Authorities there has also been an increase in the collaboration between institutions of higher education located in the same area; In a survival atmosphere according to Clark (1972)³¹

"a deep crises in the established organization creates some of the conditions of a new organization. It suspends past practice, forces some bordering groups to turn their backs on failure of the organization, and it tends to catch the attention of the reformer looking for an opportunity".

Faced with varying degrees of fiscal and enrollment crises and, in the case of the University of Malta with ideological and political crises, the Universities of Aston, Keele, Salford and Malta were all ripe for the non-incremental change Clark describes. Salford faced with the highest percentage of cuts, embarked on a massive reappraisal of its saga and so did to a certain extent Aston. In this

context a major innovation in the higher education system is the increasing collaboration between institutions, in some cases leading on to a merger. In our studies we have seen the efforts to merge the University of Keele and the Polytechnic of North Staffordshire and the fusion of the New University (the polytechnic) and the Old University of Malta. Mergers have taken place between Bedford College and Royal Holloway College both colleges in the London University system. Perhaps the most momentous so far has been the transbinary merger between the New University of Ulster and Ulster Polytechnic.

Various other examples of inter institutional co-operation could be mentioned, for example the credit transfer arrangements between Manchester University and Polytechnic, Salford University and University of Manchester Institute of Science and Technology.

15.2.5 Responses to the Environment

To a certain extent the changes which have been described above have been prompted by external pressures. The universities seemingly becoming more market oriented responding to the demands being made by various external agencies. Elsewhere in this chapter we have mentioned the multifarious and sometimes conflicting demands being made upon the universities. We will now examine a number of these demands: to become more efficient; to increase their relationship with industry; and to increase the provision of adult and and continuing education. We will look at these three areas particularly with reference to our case studies.

Increasing Efficiency

The question of responses to financial constraints is to a certain extent the subject of the case studies of Aston, Keele and Salford. Fielden (1983)³² and Sizer (1982)³³ point out that two categories of response are possible: resisting decline/distress; and adapting to it. In financial terms this manifests itself on the one hand as strategies for increasing income (resistance) and strategies for decreasing expenditure (adaptation).

It seems that institutions which fail, for whatever reason, to go for a combination of resistance and adaptation strategies are likely to find themselves in considerable trouble. To be effective financial policies should be developed in conjuncion with entrepreneurial and strategic policies.

Our case studies give numerous examples of how universities have approached these strategies and how they strived to increase their revenue and reduce their expenditure.

If we look at the two worst hit technological universities in our studies, we see that Aston's non UGC income went up from 20.1 per cent to 26 per cent during the period 1980-85, whilst that of Salford went up from 16 per cent to 39 per cent in the same period. We believe that this appreciable difference is due mainly to the objectives and emphasis of the two institutions and also through the means adopted to achieve these objectives.

The predominant objective at Aston was to turn that institution into a centre of academic excellence, whilst at Salford, the objective was to generate extra income to compensate for the UGC cuts. We do not feel that there was at Aston that same preoccupation to generate new income as there was at Salford. On the other hand at Aston a great deal more was done to reduce expenditure in the form of cutting down on academic staff. Again if we compare Aston and Salford we find that at Aston where the grant was cut by 32 per cent the number of academic staff was cut by nearly 49 per cent whilst at Salford whose grant was cut by 43 per cent the numbers of academic staff was reduced by 31 per cent. This seems to indicate that the emphasis at Aston was to meet the UGC cuts by cutting down on academic staff and this would also help Aston 'to get rid of its antiquated assets' 34 so it can start rebuilding on quality and excellence. It is perhaps this policy of ruthless reduction in staff which accounts for some of the poignant comments made about Professor Crawford. The student population at Aston was

also reduced, but the reduction here was not enough to compensate for the loss of academic staff. Consequently the staff/student ratio at Aston went down from 1:10 to 1:13 whilst that of our other universities declined only slightly. There are some members of academic staff at Aston who feel that this relatively large decline in staff:student ratios is making it more difficult for staff to do research and is thus working against Aston's professed objectives of academic excellence.

Table 15.1 shows changes in recurrent university income for the four English universities for the period 1980-1985. Table 15.2 shows the changes in wholly funded university staff, and the changes in staff:student ratios for the same four universities for the period 1980-85.

One of the most significant consequence of the financial constraints has been in the nature of the budgetary and resources allocation process in universities. Four stages have been observed in these changes Porter (1979)³⁵. The period when, on the whole, universities had ample recurrent funds. This was characterized by a bottom-up process, where spending departments bids and cuts were made, if they were needed, at institutional level. Many of these decisions were based on a very weak data base, on recurrent costs, consequences, intuition and on the persuasive powers of the heads of department.

TABLE 15.1

Recurrent University Income Excluding UGC Grant & Home Fees

4 1985	6,550	7 26.0	5 6,586	6 28.4	5 3,582	5 25.7	8 9,684	0 39.0
1984	6,304	24.7	5,825	26.6	3,315	24.5	8,198	24.0
1983	404,9	24.3	4,841	25.7	2,690	19.9	6,693	29.0
1982	6,670	24.5	4,422	25.9	2,535	19.4	4,174	20.0
1981	5,314	23.3	3,751	24.5	1,690	13.8	3,417	16.0
1980	3,934	20.1	2,696	20.9	1,046	11.3	2,833	16.0
	ASTON	% of Total	ВАТН	% of Total	KEELE	% of Total	SALFORD	% of Total .

TABLE 15.2

ACADEMIC STAFF

STAFF: STUDENT RATIOS

	1980	1981	1982	1983	1984	1985
ACADEMIC STAFF % Change Staff: Student Ratios	543	533	487	410	344	278
	100	98•2	89•7	75•5	63.4	51.2
	1:10.3	1:9•9	1:10•4	1:11	1:11.8	1:12.9
BATH ACADEMIC STAFF % Change Staff: Student Ratios	374	372	360	363	368	365
	100	99•5	96.3	94.1	98.4	97.6
	1:9•3	1:9•6	1:10.2	1:9.8	1:10.1	1:10.1
KEELE ACADEMIC STAFF % Change Staff: Student Ratios	291	298	290	267	258	246
	100	102.4	99•7	92	88.7	84.5
	1:9.7	1:9.4	1:9•9	1:10.5	1:10.6	1:10.9
SALFORD ACADEMIC STAFF % Change Staff: Student Ratios	491	478	472	388	351	339
	100	97•4	96.1	79.1	71.5	69.1
	1:9.3	1:9•5	1:9.2	1:10.7	1:10.9	1:10.5

The choices may reasonably be described as ones of 'creeping incrementalism', since very few weighty choices were necessary. In the mid 1970's additional funds became scarcer, the incremental tendency continued at a much slower rate and more selectivity was introduced. We thus began to see the development of budget processes underpinned by cost analyses and various quantitative and qualitative formulae. Alternative options and contingency plans became commonplace. The late 1970's saw a very definite period of no additional public funds, thus creating the need for the budget process to be about re-allocation and redistribution, mainly through the mechanism of using vacant posts, and about utilizing cost savings to the full as instruments of shifting resources. Planning horizons came down to one or two years. The whole budget process whilst relying heavily on perfomance data to expose choices has clearly become highly political. Finally we have the period of retrenchment where the search for areas of course or departmental closures or savage contraction is apparent. At this stage, it becomes clear that budgetary decisons which have been made hitherto on the input side of the equation can only resolve problems up to a point.

To save the money needed without severly weakening every programme area in sight, 'cut' has to give way to 'cut and weed', that is, the reduction and discontinuance of certain course and programmes had to be accompanied by

the strengthening of others or starting new ones. Decisions on weeding are clearly output type decisons which can only be made with reference to the desired shape and nature of the institution as seen in the cases of Aston and Salford, and the limitations of the budget and planning process naturally lead to heavier emphasis on longer term policy debate. This has to be informed by sophisticated and comprehensive information such as developed at Bath. With reference to the above it is not contended that all institutions inevitably pass through these stages, but the broad picture is true. Throughout the evolution we see the progressive centralization of decison taking on financial matters and with it the increasing involvement of the administration as controllers and providers of 'objective' systematic information. Finally we see a changing relationship between planning as a data based exercise and policy formation as a political exercise.

Relationship with Industry

The second illustrative example of the universities response to the environment concerns the increasing relationships with industry. The need for such collaboration and open communication has long been recognized and in our case studies, three of them being ex technological universities, the scope and degree of such cooperation seem to have been stronger than in most non technological universities. It

can be argued that as Government funding of universities is in relative decline, the time is ripe for new initiatives for industrial and commercial support to fill the financial shortcomings. This may constitute a drift towards privatization on some scale, as universities recognize that the institutional self determination may afford greater flexibility in a range of new initiatives, staffing policies, etc. through the acquisition of so called unrestricted funds.

Universities also see industrial linkages as helping to provide exposure to the 'real world' and as important aspect of staff development and student employment orientation. In the cases of Aston, Bath and Salford, with a large proportion of undergraduates on sandwich courses, the universities rely on industries to provide placement for students during their studies. At the University of Malta with the student/worker scheme the university is completely dependent on industrial and commercial organizations, public or private, to provide the sponsorship for the students. Linkages provide new sources of equipment and facilities which are discipline specific since some disciplines are more market oriented than others. Whether or not these factors will constitute a major change of institutional role and philosophy will depend to a certain extent on the entrepreunerial tradition of the institution. Where such tradition is strong as at Salford, Bath or Aston, greater university - industry collaboration will not constitute such a major change.

Since originally these were all colleges of Advanced Technology the Universities of Aston, Bath and Salford had established various contacts with industrial and commercial undertakings in their locality over many years. By the late 1960's both Bath and Salford had already established industrial consulting companies: South Western Industrial Research Limited at Bath, and Salford University Industrial Research Limited at Salford. Since the 1980's the university/ industry relations have increased considerably, for example Aston - Science Park, Technology Transfer Unit; Bath studying the possibility of Science Park; Salford - Campus, Integrated Chairs; Keele - the building of its Science Park started in 1985. At the University of Malta industry's representatives are bought in on the various boards and lecturing staff have been appointed on the boards of a number of companies. As students spend half of their time at the workplace university staff have great scope and facilty to be involved with industrial and commercial organizations.

The challenge of the technological changes and the information explosion discussed in Chapter 2 have hit harder and farther than expected, leaving many educational institutions unable to accommodate the change at a high enough degree of reciprocity. Thus, institutions, deviod of sufficiently advanced equipment and up to date faculty, may not be able to produce graduates in sufficient quantities for the rapidly proliferating high technology. It is our belief that the institutions in our study, particularly Bath,

Salford and Aston, and to a lesser extent Keele and Malta have been able to cope and accommodate the change leading to increased university - industry interaction.

Adult and Continuing Education

Universities and perhaps to an even greater extent polytechnics have for many years provided ex curricula education for adults and opportunities for continuing education whether for career development or for personal satisfaction. In the past few years there has been considerable expansion by a number of universities of this area of their activities; a number of factors have contributed to this expansion. These include Government exhortations and/or pressures, the demographic changes leading universities to seek new clients; the fast pace of technological changes requiring frequent retraining of personnel into new skills. These factors, except demographic changes, apply also to The University of Malta. Another factor which has induced the University of Malta to expand these activities was to give an opportunity to those would be university students who were not able to get into university because of lack of sponsorhsip.

The May 1985 White Paper 36 stated that opportunities for education should be available throughout life, both for career purposes and for personal fulfilment and the need increases with the pace of technological change. It is the

Government's contention that the provision of continuing education should be one of the principal parts of higher education's work. The Government believes that the costs of such education should be met by employers and mature students.

A number of projections have been made relating to the number of eighteen year olds home university entrants until the end of the century. Though there has been a great deal of controversy about the exact figures, there is a general agreement that the relevant age group has started to decline in the early eighties and will continue to do so until the mid 1990's.

The demographic decline is one of the arguments put forward by the Government for the declining funds available for higher education. The argument seems to be, if the number of young entrants into higher education is getting smaller, then higher education needs less cash.

The challenges posed on the universities by the fast technological changes have already been discussed. Initial education cannot suffice for an individual's whole working life, and opportunities must be provided by universities and other institutions of higher education to enable people to enhance and update their skills and knowledge. Provisions for new or improved knowledge and skills have also to be made for the unemployed, the self employed, and those

Our studies illustrate how the various institutions have responded to this challenge. At Aston the Centre of Extension Education was opened in June 1984. The heart of this project is Tutored Video Instruction whereby whole lectures and courses could be recorded live in the classroom and then used as a medium of instruction in industrial or other organizations. At Bath and also at Keele there is a Department of Adult Education specifically responsible for this area of activity. The Department at Keele has expanded considerably in recent years; at present it has fourteen full-time members of staff. At Salford a Sub-Committee of the Senate headed by one of the pro vicechancellors is responsible for continuing education. At Salford there are at present over 750 students on various part-time and evening courses. The area of Adult and Continuing Education is one in which the possibility of increasing collaboration between institutions could be fully exploited. At Manchester, the Consortium for Advanced Continuing Education and Training (Contact), claims (THES 8.11.85) to be the first comprehensive consortium in Britain to open access for adults into higher education by credit transfer arrangements between a number of institutions, that is Manchester University, Manchester Polytechnic, The University of Salford and the Manchester Institute of Science and Technology.

The University of Malta also extended its activities to part-time and evening students. A transition it taking place from educating solely full-time students to educating the community. In fact due to the worker student scheme no student can be considered as a full-time university student. Our case study of the University of Malta illustrates how it is responding to the twin messages of wider access and continuing education.

15.3 Conclusions

In this Study we have looked at a number of universities in two different economic, social and political environments, that is Malta and the United Kingdom. In our analyses we examined the managerial strategies adopted by the different institutions in coping with the challenges which have been facing them, particularly since the late 1970's.

The individual case studies give a general indication of the relative success achieved by each institution in overcoming the problems imposed on it, especially those created by the sharp financial cuts at Aston, Keele and Salford and the great upheavals undergone by The University of Malta. The results of our research indicates that each of the universities studied has coped with the challenges posed upon it and has gone some way towards achieving the the aims and objectives it had set out to achieve.

Our research and experience at Aston University indicates that the paramount objective of the senior management of that institution was to turn it into a centre of academic excellence. During our interviews more than one commentator observed that the UGC Cuts gave management the opportunity to cut out the dead wood, so that a smaller, fitter institution would emerge. In spite of assertions to the contrary (See Chapter 10) it seems that among the two hundred and fifty plus academics who left Aston during the past five years, there were also some of its best people. Some of these academics had no problem in getting academic posts, including professorships elsewhere. Thus overall one can say that in 1986 Aston is a smaller and fitter institution than it was in 1980, but it is difficult to predict to what extent it has moved towards becoming a centre of academic excellence like Stanford. It does not seem that Aston has up to now attracted any top brains.

Another area of concern regarding Aston is the relative low motivation and morale among some members of its academic staff. There are many academics who do not agree with the management style of the vice-chancellor and who feel that some of the hardship and misery which Aston has been through could have been avoided. They feel that the staff reduction exercise went far beyond that which was necessitated by the cuts. Table 15.3 shows Aston's performance on a number of

ASTON UNIVERSITY

INDICATORS RELATING TO ACADEMIC EXCELLENCE

	1980	1981	1982	1983	1984	1985	
Mean 'A' Level Entry Scores	7.4	8.9	9.4	10.4	11.2	11.4	
Higher Degrees Awarded % of Total	26.9	26.7	29.8	28.1	32.3	31.7	
Publications per Member of Staff	1.30	1.49	1.71	1.98	2.08	2.56	

indicators which are usually indicative of academic excellence, for example, university entrants 'A' level entry scores, higher degrees awarded, and publications per member of staff. On all these indicators Aston has moved forward; in fact on all these indicators it has done better than Keele and Salford, and in higher degrees awarded and publication per members of staff it has also done better than Bath.

We are not certain whether these improvements are enough to justify the claim that Aston has started on the road to academic excellence. What seems certain is that with the type of dynamic and vigorous leadership Aston has, the chances of getting there are better, provided that there is greater staff involvement and participation.

15.3.2 The University of Bath

The University of Bath is the exception in our U.K. case studies, because whilst the other three Universities were cut on average by 36 per cent, Bath was only cut by four per cent.

We believe that the story of the University of Bath is an excellent example of strategic academic management, particularly from the mid-seventies when strategic planning decisions were made which were going to affect that

institution for the rest of the century. Thus the bulk of our case study on this University relates to the strategy adopted before the UGC 1981 Cuts and an analysis of the various factors which lead us to believe were responsible for the lenient treatment handed out to Bath.

The soft treatment by the UGC and a retiring vicechancellor might have been some of the reasons why in the
early eighties Bath slipped slightly on certain indicators.
On the other hand the coming of th new vice-chancellor and
a tendancy towards more centralisation are likely to ensure
that Bath remains on of the top English Universities.

Table 15.4 shows Bath's performance and steady progress on 'A' level entry scores, higher degrees awarded and publications for the period 1980-85.

15.3.3 The University of Keele

The Strategy for the Early Eighties document clearly set out the aims and objectives of this institution for the first half of the 1980's. We have seen that this was a medium term plan (3-5 years) to cope with the cuts. It seems that it was made on the assumption that the 1981 UGC Cuts were a once and for all exercise. One can safely say that the objectives and aims of the plan were achieved and that the minimum necessary measures were taken to meet the

UNIVERSITY OF BATH

INDICATORS RELATING TO ACADEMIC EXCELLENCE

	1980	1981	1982	1983	1984	1985
Mean 'A' Level Entry Scores	11.1	11.6	11.9	12.5	12.8	12.5
Higher Degrees Awarded % of Total	17.7	21.3	23.2	22.6	24.7	23.7
Publications per Member of Staff	1.60	1.79	1.83	2.12	2.1	2.11

decreased funding. No serious measures were taken to improve the overall standing of Keele over the long term period, particularly in view of the fact that the Government's policy of retrenchment of higher education did not stop in 1981, but is likely to continue well into the 1990's.

In spite of the above there were were some improvements on a number of indicators. Table 15.5 shows Keele's performance on 'A' level entry scores, higher degrees awards and publications per member of staff.

The foundations of a strategic management policy for Keele started in earnest with the coming of the new vice-chancellor in 1985. The various changes he introduced in a relatively short time and the sense of urgency and enthusiasm he seems to have infused in Keele's community are a clear example of what dynamic vigorous leadership can do to an organisation.

15.3.4 The University of Salford

One of the most interesting aspects about this case study was that in spite of the savage cuts which were imposed upon the university of Salford, the Salford community as a whole remained united and there was not the internal dissent and recriminations that took place elsewhere.

UNIVERSITY OF KEELE

INDICATORS RELATING TO ACADEMIC EXCELLENCE

7.7 8.5	16.3 15.9	1.86 2.25
7	14.1	1.8
Mean 'A' Level Entry Scores	Higher Degrees Awarded % of Total	Publications per Member of Staff

7	7.7	8.5	6	9.6	10
14.1	16.3	15.9	18.7	17	19
1.8	1.86	2.25	. 2.09	2.3	2.49

The various factors why this was so are discussed in the Salford case. Again one of the more important contributory factors seems to be the dynamic leadership shown by the vice-chancellor who took office in September 1981 just two months after the UGC Cuts. Having suffered the most heavy cut, one of Salford's primary objectives was to find out ways and means to increase the University's income from non UGC sources. In Table 13 (Page) we saw how this rose from 16 per cent of total income in 1980 to nearly 40 per cent in 1985. As this income has been earned through the direct initiative and contribution of the academic staff, various measures were introduced by which the staff could also share the benefits of this increased income.

This might be one of the reasons why motivation and morale seemed relatively higher at Salford than at Aston. At Salford the staff could enjoy some of the benefits brought about by the changes. At Aston, increased output in publications did not bring any tangible rewards either in monetary terms or in the form of promotions.

It is not possible to say whether the entrepreunerial activities undertaken by Salford have affected adversely the intellectual vitality of the university and the effectiveness of its teaching.

Table 15.6 shows the changes in a 'A' Level entry scores,

UNIVERSITY OF SALFORD

INDICATORS RELATING TO ACADEMIC EXCELLENCE

	1980	1981	1982	1983	1984	1985
Mean 'A' Level Entry Scores	7.2	7.0	8.2	9.1	10.1	10.8
Higher Degrees Awarded % of Total	16.4	17.5	17.1	15.1	15.4	23.7
Publications per Member of Staff	1.22	1.28	1.23	1.52	1.65	2.12

percentage of higher degrees and publications per member of staff. These figures seem to indicate that academic excellence has not been neglected. It is true that they are not as impressive as those achieved at Aston but then, the primary objectives at the two institutions was different.

15.3.5 The University of Malta

The challenges faced by the UK universities were mainly due to the UGC Cuts and to the demographic changes in the student population. At Malta, the challenges were mainly of a social and ideological nature in the form of introducing the worker-student scheme and other changes in Malta's higher education.

It seems that The University of Malta has been reasonably successful in achieving the primary objectives of the changes of the late 70's. This was to introduce courses which are more relevant to the economic needs of the Islands and a second important objectives was 'to create a system which will give everybody the chance to get there' ³⁷. Due to various limitations this study is not in a position to assess whether and to what extent this second objective has been achieved. It is hoped that this will be the subject of a future study.

Considering the difficult times experienced and the

various predictions of failure and doom, the University of Malta seems to have succeeded admirably not only in coping with the changes imposed on it, but has striven to regain its past international reputation. The recent recognition of its medical degrees by the British General Medical Council 38 is a step in that direction.

We submit that the institutions in our study have been relatively successful in coping with the challenges that faced them and have adapted and changed to such an extent that they are better equipped to meet future challenges.

We do not believe it is possible to measure in detail the measure of success achieved by each institution and, in any case, this is not our goal. Our goal is to find out whether the particular changes instituted by the respective university have enabled it to cope more effectively with the challenges it faces and whether certain factors or characteristics may have contributed more significantly to 'success'.

Our research seems to indicate that the factors or characteristics which prevailed in our case studies and were discussed in the previous section have contributed significantly to their 'success'. Moreover, extensive studies of the management and change in institutions of higher education in America and in Britain come up with similar set of factors or characteristics.

During the 1970's the Carnegie Council on Policy
Studies in Higher Education 39 undertook a study of US
higher education, and attempted to identify the characteristics of the institutions which apparently survived
and prospered during recession. The dominant characteristics of the successful institutions included the following -

"The ability to develop a distinctive institutional role and mission which accorded strongly with society's needs; a strong sense of institutional determination and will to exploit market opportunities to the full; a strong process of programme development accompanied by flexible course and organizational structures and systematic staff development; establishment of strong contacts with business; positive corporate leadership based on broad consensus was seen as essential to enable resources to be shifted around the institution flexibly according to need."

Keller 40, on the basis of a national study of management strategies in American higher institutions, identifies a number of features that seem to have been successful in dealing with pressures for change. The features identified by Keller include the following - adademic leaders are becoming more active; campus governance is taking new forms, a new form of cabinet government is taking place; finance is assuming a new prominence; the new management relies mainly on control, planning, evaluation and reallocation; people are becoming more important; the external environment and the market are receiving greater attention.

A similar set of characteristics has been identified by Davies (1985)⁴¹ based on his experience and studies of British Universities.

The characteristics identified in our research and in the studies mentioned above are a clear indication of the trends in university management. Faculty and administrators have to create a new working relationship. Faculty must give the academic management more executive power and more authority for overall planning and priority setting. But administrators must give faculty the opportunity to examine the plans and priorities with the full strength of their critical and analytical expertise. Faculty will have to understand confidentiality and executive leadership better then they do now. Administrators will have to understand the value of candour and honesty and of professional scrutiny and criticism.

In this study we have attempted to examine the external and internal contexts of university management and examined the responses of a number of institutions. It seems likely that the external pressures will not only change and increase but will fluctuate more widely. Thus flexibility and responsiveness are key requirements for a university.

Our Study identifies a number of characteristics which are likely to facilitate this process. Universities should be more aware of developments in management and more accommodating to managerial change. They should be familiar

with the experience of management in other universities, at home and abroad.

We trust that this Study will make some contribution towards increasing this awareness.

APPENDIM A

Performance Indicators

1 Performance indicators for universities have proved difficult to devise and there is no universally accepted series that is in general use. Most universities have devised their own series, but these are only rarely brought together and considered as a whole. The indicators are commonly divided into three categories:

(a) Internal performance indicators include

- market share of undergraduate applications (by subject)
- graduation rates and classes of degrees
- attraction of masters and doctoral students
- success rate of higher degrees (and time taken)
- attraction of research funds
- teaching quality

(b) External performance indicators include

- acceptability of graduates (postgraduates) in employment
- first destination of graduates (postgraduates)
- reputation judged by external reviews
- publications by staff and citations
- patents, inventions, consultancies

- membership, prizes, medals of learned societies
- papers at conferences

(c) Operating performance indicators include

- unit costs
- staff/student ratios
- class sizes
- course options available
- staff workloads
- library stock availability
- computing availability

Dear

I am carrying out research on Organizational Change and Development in Higher Educational Institutions - A Comparative Study in a number of Universities.

I would be most grateful if you can fill the enclosed questionnaire adding on any views or comments which you would like to make.

The questionnaire is divided into three brief sections.

- Section 1. Respondents' background
 - 2. Educational Change and Innovation in Universities
 - 3. Innovation and Change in The University of Malta

Whilst hoping to be able to meet you before the end of July, please send the filled-up questionnaire to me at the Faculty of Management Studies.

Thanking you for your kind cooperation.

Yours sincerely,

Professor RENO SAMMUT

P.S. The anonymity of the respondents will be strictly observed.

The University of Malta Questionnaire

Section 1: Respondents' Background

The object of this section is to acquire background information about the qualifications and experience of the respondents.

 When did you start teaching on a full-time basis? (including in other educational institutions)

Over 30 years ago	
Over 20 years ago	
Over 10 years ago	
Less than 10 years	

2. Age of respondent

Under 30	
Over 30 but under 40	
Over 40 but under 50	
Over 50	

3. Educational Background

Specialization broad area division of working time

Actual

Teaching	
Research	
Other	

Teaching

Research

Other

Desired

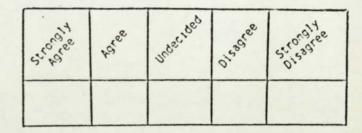
Any other Comments or Views.

Section 2: Educational Change and Innovation in Universities.

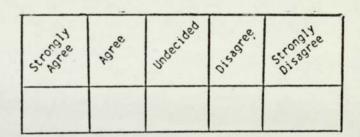
The object of this section is to seek the respondents' views on Innovation and Change in Universities in geneal.

Please indicate below your level of agreement or disagreement with each of the following statements.

 Universities are very slow to Innovate and Change.



 Governments and/or other authorities have to impose desired innovations and change on Universities.



 Universities should play a more active part in the social and economic development of the community of which they form part.

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 Members of staff in Universities should be informed of Innovation and Change which is being planned.

ree

 Members of staff in Universities should be consulted on Innovations and Changes which are being planned.

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 Members of staff in Universities should actively participate in the planning of Innovations and Change.

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Any other Comments or Views

Section 3: Innovation and Change in The University of Malta.

The object of this section is to seek the views of the respondents on the recent changes in higher education in Malta - in particular the introduction of the student-worker scheme.

Please indicate below your level of agreement or disagreement with each of the following statements.

 Do you agrre with the studentworker scheme as it was introduced in the late 70's?

, de	ndecided	Socie	serongly ee
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2. Do you agree that members of staff should have been actively consulted in introducing 'the changes?

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3. Do you agree that members of staff should have participtated more actively in introducing the changes?

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4. Do you agree that the studentworker scheme was successfully implemented?

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Please tick the relevant box.

Section 3 (contd.)

Give your reasons for your answer to the previous question (4).
 (If space below is insufficient, continue writing overleaf).

6. What in your views should be the role of the University of Malta for the next ten years. Please rank in order of importance No. 1 being the MOST important:

Provide trained manpower

Produce an educated person

Research

Advisory and Consultancy Services

Develop critical and analytical skills among students

Other (s)

Any other comments or views.

University of Salford

Aims and Objectives

Introduction

1. Article 3 of the Charter states:

"The objects of the University shall be to advance learning and research, especially into the basic and applied sciences, and to enable students to obtain the advantages of a university education".

Within this broad framework the University seeks in particular to serve, through teaching and research, the best interests (a) of industry, commerce and the public service, and (b) of each of its students. Teaching and research are the two means whereby the University endeavours to achieve its objectives. They may be clarified in more detail as follows.

Teaching

- 2. The University's teaching is intended to result in graduates (bachelors, masters and doctors) with certain characteristics which at the same time
 - (i) fit them for employment in industry, commerce or the public service,
 - (ii) make them responsible but not uncritical citizens of society, and
 - (iii) allow them to develop their individual thoughts and aspirations.

These characteristics may be listed as follows:

- a) the capacity to acquire, organise and systematise knowledge and thereby to develop what the Robbins Committee called 'the general powers of the mind'
- b) the capacity to appreciate, to value and to make judgements of what is beautiful, of good repute and fit for its purpose. This involves the education and training of feelings and emotions as well as implying a moral or ethical framework within which a) above must be attempted
- c) the capacity to identify, formulate and then to solve problems and to make, design, organise, produce or construct useful objects and services
- d) the capacity to co-operate with others; to value communal endeavour and achievement as well as competition.
- 3. In common with most other universities, the University would expect its graduates to possess the qualities in a) and b) above. The characteristics which distinguish a Salford graduate, the University believes, are to be found in c) and d). It is the University's intention that these problemsolving and organising skills should be the particular qualities of its graduates the ability to cope, to do and to deliver.

In most situations the practice of these skills will involve graduates in co-operation with others and thereby entail their developing the capacity to achieve an affinity of purpose with their fellows.

These qualities are what the University means by Capability; and by instilling them in its student the University's

purpose is to Educate for Capability. As a consequence, the University aims at all levels in its teaching programmes to inform academic instruction with the needs of professional training and to improve the professional training with the discipline of academic rigour.

Research

- 4. Research is often said to characterise universities because only those teachers whose teaching is enriched and informed by their personal research can be to said to teach at the frontiers of knowledge or at the highest intellectual levels.

 'Research' however is not an easily defined concept and there are a number of activities, all of which fall under this general description, which in their own individual and differing ways inform and enhance the teaching process.

 The University recognises for example distinctions between
 - a) 'original' research, which seeks to structure and validate genuinely novel ideas and new information using the canons and conventions appropriate to the field or discipline in question
 - b) 'derivative' research, which seeks to work out the implications of novel ideas and new information by applying appropriate practices and techniques in a limited context
 - c) 'interpretative' research, which sifts, critically examines and analyses existing material in order to discover perspectives and dimensions which will extend the body of knowledge about the subject or form the basis for further research.

The list is not intended to be exhaustive. All of these notions need to be distinguished from 'technology transfer'.

The University does not believe that activities based in the above categories can be placed in an absolute order of merit.

Technology and Skill Transfer and Professional Enhancement

Drawing on expertise in teaching and in research the University engages in a wide range of activities which may be described as technology transfer, skill development and transfer, and professional enhancement. These activities involve interaction with outside organisations of many sorts and with individual professional people. Many of the activities contribute to an overall programme of continuing education aimed at persons other than the University's full-time students. The emphasis placed on this aspect of its work is a particularly distinguishing feature of the University.

Conclusion

- 6. The University seeks to achieve its objectives by promoting and supporting the following activities by members of academic staff, acting both as individuals and collectively in departments and faculties:
 - a) Undergraduate teaching, in particular that which educates for capability
 - b) Postgraduate teaching for masters and PhD degrees
 - c) Personal and group research

- d) Technology and skill transfer in conjunction with outside organisations and activities to provide professional enhancement and continuing education
- e) Innovation in any of a) to d) above.
- 7. The University makes no judgements of how individual members of academic staff should spend their time between the various activities listed in a) to e) above. However the University does encourage each member of staff, acting in conjunction with colleagues in his/her working group be it a research team, teaching subject group, department faculty to consider and to arrive at a corporate view of the mix of these activities which would in turn define what sort of institution the University of Salford is to become.

APPENDIX D

The University of Malta

External Examiners

1984 & 1985

Faculty of Engineering and Architecture

Architecture Professor H. Kramel, Switzerland

Professor L. Rondos, Slovak Technical Civil

Engineering University, Czeckoslovakia

Electrical Professor W. Shepherd, University of Bradford Engineering

Mechanical Professor A.G. Atkins, Engineering University of Reading

Faculty of Management Studies

Accountancy Professor S. Dev, London School of

Economics and Political Sciences

Business Professor N. Hood, Strathclyde

Management Business School

Public Professor R. Bird, Institute for Policy

Analysis, University of Toronto Administration

Faculty of Medicine and Surgery

Anatomy Professor P. Barer, University of

Sheffield

Physiology and Professor R. Goldsmith, University of

Biochemistry London

Pathology Professor N.F.C. Gowing, London

Dr Ch. Joine , Guy's Hospital, London Professor H. Kesteloot, Catholic University Medicine

of Louvain

Surgery Professor R. Clark, University of

Sheffield

Professor J. Gruwez, Catholic University

of Louvain

Obstetrics and Gynaecology

Professor I. MacGillivray, University of

Aberdeen

Professor F.A. Van Ash, Catholic University

of Louvain

1985

Faculty of Engineering and Architecture

Architecture Professor H. Kramel, Switzerland

Civil Professor L. Rondos, Slovak Technical Engineering University, Czechoslovakia

Electrical Professor D. O'Kelly, University of

Engineering Bradford

Mechanical Professor A.G. Atkins, University of

Engineering Reading

Faculty of Management Studies

Accountancy Professor S. Dev, London School of

Economics and Political Sciences

Pusiness Professor N. Hood, Strathclyde

Management Business School

Public Professor R. Bird, Institute for Policy

Administration Analysis, University of Toronto

Faculty of Medicine and Surgery

Anatomy Professor D. Brynmore Thomas, University

of St. Andrews

Biochemistry Professor H. de Wulf, Catholic University

of Louvain

Physiology Professor R. Goldsmith, University of

London

Pathology Professor N.F.C. Gowing, London

Medicine Professor J.C. Demanet, Free University

of Brussels, Belgium Professor G. Watkinson, Western Infirmary

Glasgow

Surgery Professor R. Clark, University of

Sheffield

Professor J. Gruwez, Catholic University

of Louvain

Obstetrics and Gynaecology

Professor Sir John Dewhurst, University

of London

Professor M. Renaer, Catholic University

of Louvain

Faculty of Dental Surgery

Dental Surgery Professor A.S. Prophet, London

1. Jadot, J. et al. (1980) <u>Survey on the State of-the-Art</u> and Likely Future Trends.

Report presented to the Fifth General Conference of the Programmes on Institutional Management in Higher Education OECD/CERI Paris, September.

- 2. House of Commons Committee on Education (1980a). The Funding and Organization of Courses on Higher Education Fifth Report 1979/80, Volume 1-Report, London: HMSO.
- 3. Debates of the House of Representatives (1st Session)
 4th Parliament, held on Monday 26th June, 1978.
- 4. Sizer, J. (1982), 'Assessing Institutional Performance and Progress'

In: Wagner, L, (Ed) Agenda for Institutional Change in Higher Education Guildford: SRHE & NFER-NELSON.

Notes and References to Chapter 2

- 1. Clark, K. (1979) 'Administration of Higher Education in an Era of Change and Conflict' in Conflict,
 Retrenchment and Reappraisal, University of Illinois
 Press. pp 15, 18.
- 2. <u>'The Control of the Campus'</u> a Report on the Governance of Higher Education. The Carnegie Foundation of the Advancement of Teaching, Washington 1982.
- 3. Carter, C.F. 'The British Universities and the State' Higher Education. Volume 9 pp 1.5, 1980.
- 4. The Development of Higher Education into the 1990's HMSO CMND 9524, 1984.
- 5. HMSO CMND, 9524. p17 See 4 above
- 6. Jocelyn, S. Why Vice-Chancellors Should be Fighting T.H.E.S. 18.10.85
- 7. Kerr, C. (1980) Three Thousand Futures: The Next Twenty Years in Higher Education. Jossey Bass
- 8. Birley, D. (1984) The Management of Change. Paper presented at the Sixth International Conference on Higher Education, Lancaster University.

- 9. Butler, R. The Management of Scarce Resources.
 Higher Education Review Volume 17. No 3 pp70-73, 1985.
- 10. Report of the Steering Committee for <u>Efficiency Studies</u>
 <u>in Universities</u>. Committee of Vice_Chancellors and
 Principals, 1985.

Notes and References to Chapter 3

- 1. Weber, M. (1947). The Theory of Social and Economic Organization. New York: The Free Press (Macmillan).
- 2. Gouldner, A.W. (1959). 'Organisational Analysis' in Merton, R.K., Brown, L., and Cottrell L.S. (eds)
 Sociology Today, New York: Basic Books.
- 3. March, J.G. and Simon, H.A. (1985). Organizations
 New York: Wiley.
- 4. Cohen, M.D., March, J.G., and Olsen, J.P., (1972).

 'A Garbage Can Model of Organizational Choice'.

 Administrative Science Quarterly, 17 pp 1 25.
- March, J.G., Olsen, J.P. (1976).
 Ambiguity and Choice in Organizations. Bergen, Norway:
 Universitets forlaget.
- 6. Richman, B.M. Farmer, R.N. (1974). <u>Leadership, Goals</u>
 <u>and Power in Higher Education</u>. San Francisco:
 Jossey Bass.
- 7. Kogan, M., Becher, T. (1983). <u>Process and Structure</u> in Higher Education. London: Heinemann
- 8. Millett, J. (1962). The Academic Community. New York:
 Mc Graw Hill

- 9. Clark, B.R. (1984). <u>The Higher Education System</u>. Berkeley: University of California Press.
- 10. Williams, G., Blackstone, T. (1983). Response to

 Adversity, Higher Education in a Harsh Climate. Guildford:

 SRHE & NFER NELSON.
- 11. Weber, M. (1947). See 1 above.
- 12. Baldridge, V.J., Curtis, D.V., Echer, G., Riely, G.L., (1978). Policy Making and Effective Leadership. San Francisco: Jossey-Bass.
- 13. Clark, B.R. See 9 above.
- 14. Lockwood, G. (1985). Universities as Organisations in Lockwood, G. Davies, J. (Eds). <u>Universities: The Management Challenge</u>. U.K.: SRHE NFER NELSON
- 15. Baldridge, J.V., (1971). Power and Conflict in the University. New York: J. Wiley & Sons.
- 16. March, J.G., Simon, H.E., (1958). Organizations. New York: Wiley.
- 17. Pfeffer, J. (1981). <u>Power in Organizations</u>. Marchfield: M.A. Pitman.
- 18. Cohen, M.D. et al (1973). See 4 above.

- 19. March, J.G. et al (1976). See 5 above.
- 20. 1bid
- 21. Cohen, M.D. et al (1972). See 4 above.
- 22. Weick, K.E. (1976). Education Organisations as Loosely Coupled Systems. Administrative Science Qtly. 21 pp 1-19.
- 23. March, J.G. et al (1976). See 5 above.
- 24. Bertalanffy, L. Von (1968). <u>General Systems Theory</u>.

 <u>Foundations Development Applications</u>. (Revised Edition)

 New York. George Braziller Inc.
- 25. Katz, D., Kahn, R.L. (1978). The Social Psychology of Organizations. New York, Wiley.
- 26. 1bid. pp 18, 19
- 27. 1bid. pp. 25
- 28. 1 bid.
- 29. Kast, E.F., Rosenzweig, J.E., (1979). Organisation and Management: A Systems and Contingency Approach.

 Kogakusha: McGraw-Hill. pp 103-104.

- 30. Kogan. M, Becher., T. (1983). See 7 above.
- 31. Ellstrom, P.E., (1983). Four Faces of Educational Organizations. Higher Education Volume 12 pp 231-241.
- 32. Thompson, J.D. (1967). Organizations in Action. New York: McGraw-Hill.
- 33. Enderud, M.G., (1977). Four Faces of Leadership in Academic Organizations. Norway: Nyt Nordisk Forlag.
- 34. Richman, B.M., Farmer, R.N., (1974). See 6 above.
- 35. Davies, J.L., Morgan, A.W. (1982). <u>'The Politics of Institutional Change'</u>. In: Wagner, L. (Ed). Agenda for Institutional Change in Higher Education. Guildford: SRHE & NFER-NELSON.
- 36. Enderud, H.G., (1977). See 33 above.
- 37. Keller, G., (1983). Academic Strategy: The Management Revolution in American Higher Education. Baltimore: The John Hopkins University Press.
- 38. Baldridge et al (1978). See 12 above.
- 39. 1bid.

- 40. Kerr C. (1972) The University as an Organisation.
 In Perkins, J.E., (Ed). A Report for the Commission of Higher Education, New York: McGraw-Hill.
- 41. Lindsay, A., (1981) Assessing Institutional Performance in Higher Education. A Managerial Perspective.

 Higher Education 10. pp 687-706.
- 42. Lockwood, G., (1983). Managing the Crises. THES 23.3.83

 Managing the Change. THES 1.4.83.
- 43. Report of the Steering Committee for <u>Efficiency Studies</u>
 <u>in Universities</u> (1985). Jarratt Report. CVCP 1985
- 44. Trow, M. (1976). 'Elite Higher Education: An Endangered Species:' Minerva, XIV, 3, 370.
- 45. Clark, B.R. (1979). 'Cordination Patterns and Process'.
 In Kerr C. and others. 12 Systems of Higher Education:
 6 Decisive Issues, New York: International Council for Educational Development. P. 59.
- 46. Telem, M., (1981). The Institution of Higher Education.

 <u>A Functional Perspective</u>. Higher Education 10.

 pp. 581-596.
- 47. Kast, F.E., Rosenzweig J.E., (1978). See 29 above.

- 1. Baldridge, J.V., et al (1978). <u>Policy Making and</u> <u>Effective Leadership</u>. San Francisco: Jossey Bass.
- 2. Lockwood, G. Davies, J., (1985). <u>Universities: The Management Challenge</u>. Guildford: SRHE & NFER NELSON.
- 3. Cyert, R.M., (1978). The Management of Universities of Constant or Decreasing Size. Public Administration.
- 4. Herzberg, F. (1966). Work and the Nature of Man. (World 1966). pp. IX, 33.
- 5. Montana, P. (1978). Marketing in Nonprofit Organizations.
 New York: Amacom, p. 30.
- 6. Sizer, J. (1979). <u>Performance Assessment and Management of Universities for the 1990's</u>. Working paper presented at the Conference of University Administrators: Edinburgh.
- 7. Craven, B.M. et al (1983). Resource Allocation in in Higher Education Britain. Higher Education 12 (1983). 579-581.
- 8. Balderston, F.E. (1974). <u>Managing Today's Universities</u>. San Francisco: Jossey Bass.

- 9. Norris, G. (1978). <u>The Effective University: A Management by Objectives Approach.</u> Farnborough: Saxon House. p.25.
- 10. Birly, D. (1984). The Management of Change.

 Keynote address Sixth International Conference on Higher Education, Lancaster.
- 11. Clark, B.R. (1981) <u>A Cross-National View</u>, in Wagner, L. (Ed.) Agenda for Institutional Change in Higher Education: Guildford: SRHE & NFER NELSON.

12. Contemporary Definitions of Management

Management is the process by which a cooperative group directs actions of others towards common goals. (Massie and Douglas)

Management involves the coordination of human and material resources toward objectives accomplishment. (Kast and Rosenzweig)

Management is the establishment of an effective environment for people operating informal organizational groups. (Koontz and O'Donnel)

Management entails activities undertaken by one or more persons in order to coordinate the activities of others in the pursuit of ends which cannot be achieved by anyone person. (Donnelly, Gibson, and Ivancevich)

Massie, J.L. and Douglas, J. (1973). Managing: A Contemporary Introduction. Englewood Cliffs, N.J.: Prentice Hall, p 24.

Kast, F.E. and Rosenzweig, J.E. (1978). Organization and Management: A Systems Approach. New York:
McGraw Hill. p.6.

Koontz, H and O'Donnel, C. (1972). <u>Principles of Management: An Analyses of the Managerial Functions.</u>
New York: McGraw Hill. p.42

Donnelly, J.H. Gibson, J.L. and Ivanevich, J.M. (1975).

<u>Fundamentals of Management: Functions, Behaviour, Models</u>.

Homewood, see: Business Publications.

- 13. Albanese, R. (1975). Management: Toward Accountability for Performance. Homewood, see: Richard D. Irwin. p.49.
- 14. Business Managemnt Council (1968). Report No. 1. New York.
- 15. Drucker, P. (1954). <u>The Practice of Management</u>. New York: Harper and Brothers.
- 16. Bennis, W.G. (1969). Organization Development. Reading, Mass: Addison Wesley.
- 17. Steers, R.M. (1979). Organizational Effectiveness:

 A Behavioural View. S. Monica California: Goodyear.
- 18. House of Commons Select Committee (1980a). The

 Funding and Organisation of Courses in Higher Education.

 Fifth Report 1979/80, Volume 1 Report, London: HMSO.

- 19. Shattock, M.L. (1982). How Should British Universities
 Plan for the 1980's. Higher Education 11 (1982).
 pp. 193-210.
- 20. Ashworth, J.M. (1985). What Price an Ivory Tower?

 University-Industry Relationship. Higher Education
 Review, Summer 1985. pp. 31-35.
- 21. Fielden J. (1981). <u>Strategies for Survival</u> in Morris, A & Sizer, J.E. (Eds). Resources and Higher Education. Guildford: SRHE NFER/NELSON.
- 22. Davies, J. (1985). The Agenda for University Management in the Next Decade in Lockwood, G. and Davies, J. (Eds.)
 Universities: The Management Challenge. Guildford:
 SRHE: NFER_NELSON.
- 23. Morris, G. (1978). See 9 above.
- 24. Lindsay, A. (1981). Assessing Institutional Performance in Higher Education: A Managerial Perspective.

 Higher Education 10 (1981). pp 687-706.
- 25. Report for Efficiency Studies in Universities. (1985)
 Committee of Vice-Chancellors and Principals.
- 26. National Data Study. (1985) Commissioned by the Steering Committee for Efficiency Studies in Universities. C.V.C.P.

- 27. Baldridge, J.V. (1971). Power and Conflict in the University. New York: McGraw Hill.
- 28. Peterson, M.W. (Ed.) (1976). Benefitting from Institutional Research. New Directions for Institutional Research No. 12.
- 29. Lindsay, A. (1981). See 24 above.
 - 30. Sizer, J. (1979). See 6 above.
 - 31. Sizer, J. (1981). Assessing Institutional Performance and Progress in Wagner, L. (Ed.) Agenda for Institutional Change. Guildford: SRHE NFER-NELSON.

Notes and References to Chapter 5.

- 1. Trow, M. (1975). The Public and Private Lives of Higher Education. Deadalus, Winter 1975. pp 113-127.
- 2. Hesburgh, T. (1971). The Nature of the Challenge:

 Traditional Organisation and Attitude of Universities

 Toward Contemporary Realities, in Keretz, S.D. (Ed.)

 The Task of Universities in a Changing World. Notre

 Dame: University of Notre Dame Press p.3
- 3. Clark, B.R. (1981). 'A Cross-National View', in Wagner, L. (Ed.) Agenda for Institutional Change, Guildford: SRHE & NFER-NELSON.
- 4. Kogan, M. Boys, C. (1981). <u>The Politics of Sectoral Change</u> in Wagner, L (Ed.). Agenda for Institutional Change, Guildford: SRHE & NFER-NELSON.
- 5. Report of the Steering Committee for Efficiency Studies in Universities (1985). Committee of Vice-Chancellors and Principals.
- 6. Archer, M.S. (1979). <u>Social Origins of Educational</u> Systems. London: Sage Publications
- 7. Clark, B.R. (1983). The Contradictions of Change in Academic Systems. Higher Education 12 (1983) p 101-116.

- 8. Becher, T. Kogan, M. (1980). Process and Structure in Higher Education. London: Hienemann
- 9. Norris, G. (1978). The Effective University: A Management by Objectives Approach. Farnborough: Saxon House
- 10. Education Act No. XXI of 1978 dated 7 July 1978. Supplement to the Government Gazette (Malta)
 No. 13, 508 Section A.
- 11. Olsen, M.E. (1978). The Process of Social Organisations
 New York: Holt, Rinehart and Winston. p.26.
- 12. Olsen, M.E. See 11 above. p.26.
- 13. Olsen, M.E. See 11 above. p.29.
- 14. Herbert, T.T. (1981). <u>Dimensions of Organisational</u>

 <u>Behaviour</u>. New York: Macmillan Publishing Co. Inc.
 P. 347.
- 15. Herbert, T.T. (1981) See 14 above. pp 343-345.
- 16. Clark, B.R. (1983). See 7 above pp 113-114.
- 17. Weick. K.E. (1976). Educational Organisations as Loosely Coupled Systems. Administrative Science Quarterly 21. pp 1-19.

Notes and References to Chapter 6

- 1. Miller, H. & Walford, F. (1985). A Case Study of Financial Constraints in British Universities.
 University of Aston Paper.
- 2. Higher Education: Report by the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins, 1961-1963. CMND 2153 (1963). London: HMSO.
- 3. Halsey, A.H. & Trow, M.A. (1971), with the assistance of O. Fulton. The British Academics. London: Faber and Faber.
- 4. Robbins Report. See 2 above.
- 5. Robbins Report. See 2 above.
- 6. Anderson Report (1960).
- 7. Crossland, A. (1965). Speech made at Woolwich Polytechnic, 27th April.
- 8. Burgess, T. (1982). <u>Autonomous and Service Traditions</u>. in Wagner L. (Ed.) Agenda for Institutional Change.

 Guildford: SRHE NFER-NELSON

- 9. Becher, T. & Kogan, M. (1980). Process and Structure in Higher Education. London: Hienemann.
- 10. Berdahl, R.O. (1980). <u>British Universities and the State</u>. Berkeley: University of California Press.
- 11. Moodie, G. (1983). <u>Buffer Coupling and Broker</u>

 <u>Reflections on 60 years of the U.G.C.</u> Higher Education 12 (1983) 331-347.
- 12. Moodie, G. See 11 above.
- 13. Ashworth J.M. (1982). Reshaping Higher Education in Britain. Royal Society of Arts Lecture.
- 14. Ashworth J.M. (1982). See 13 above.
- 15. Report of the Steering Committee for <u>Efficiency Studies</u> in <u>Universities (1985)</u>. Committee of Vice Chancellors Principals.
- 16. Livingston, H. (1974). <u>The University: An Organisational Analysis:</u> London: Blackie
- 17. Livingston, H. (1974). See 16 above.
- 18. Report of Steering Committee. See 15 above.
- 19. Report of Steering Committee. See 15 above.

- 20. Report of Steering Committee. See 15 above.
- 21. Kogan, M. & Kogan, D. (1983). The Attack on Higher Education. London: Kogan Page.

Notes and References to Chapter 7

- 1. Williams, G. (1984). Address of Welcome. Sixth International Conference on Higher Education. University of Lancaster: August 1984.
- 2. Department of Education and Science (1982). <u>Brief to Participants</u>. Higher Education Development Seminar. Hatfield Polytechnic: 1982.
- 3. DES Brief to Participants. See 2 above.
- 4. Kogan, M. & Kogan, D. (1983). The Attack-on Higher Education. London : Kogan Page.
- 5. Parkes, E. (1985). <u>Facts Behind U.G.C. Financial Cuts</u>. London: The Times 4th September 1985.
- 6. Ashworth, J.M. (1985). <u>Tomorrow's Universities: Ivory</u>
 <u>Towers Frontier Posts, or Service Stations</u>. Royal Society
 of Arts: Cantor Lecture 1985.
- 7. Department of Education and Science: Redundancy

 Compensation Payments to University Staff. National
 Audit Office. House of Commons paper 598; London:

 HMSO as per The Times 6th November 1985.

- 8. U.G.C./N.A.B. Advice to the Government (1984).

 A Strategy for Higher Education into the 1990's. Times
 Higher Educational Supplement 14 September 1984.
- 9. Report of the Steering Committee for Efficiency Studies in Universities. (1985) Committee of Vice-Chancellors and Principals May 1985.
- 10. Warwick, D. (1985). <u>Leaving Out the Less Obvious.</u>
 Union's View on Jarratt Committee Report T.H.E.S.
 12th April 1985.
- 11. The Development of Higher Education into the 1990's.

 Cmnd 9524 May 1985. London : HMSO.
- 12. Parkes, E. (1985) Times Higher Educational Supplement 26 July 1985.
- 13. Ingram, D. (1985) Times Higher Educational Supplement 26 July 1985.
- 14. Thompson, M.(1985) Times Higher Educational Supplement 26 July 1985.
- 15. Martin, L. (1985) Times Higher Educational Supplement 26 July 1985.
- 16. Bishop, R. (1985) Times Higher Educational Supplement 26 July 1985.

- 17. The Future of Universities. (1986). Committee of Vice Chancellors and Principals. P.1.
- 18. The Future of Universities. See 17 above. P.24.
- 19. <u>U.G.C. May Issue Bankruptcy Warnings</u>. Times Higher Educational Supplement. 23 May 1986.
- 20. Government Will Consider Case for Extra Cash. Times
 Higher Educational Supplement. 23 May 1986.

Notes and References to Chapter 8

- 1. The University of Malta Calendar 1985/86 p.3.
- 2. The Royal University of Malta Annual Report 1968.
- Report of the Royal Commission on Higher Education in the Colonies (1945). Asquith Commission: Cmnd 6647

 London: HMSO.
- 4. Report of the Commission on Higher Education (1957)
 Sir. H. Hetherington (Chairman). The Royal University
 of Malta. September 1957.
- 5. Report of Commission on Higher Education. See 4 above. p.11.
- 6. "Education Act No XXI of 1978 dated 7th July 1978".
 In Supplement of the Government Gazette (Malta).
 No. 13. 508 Section A.
- 7. The Royal University of Malta Commission (1973).

 (The XVth Report Part 1 March 1973. p.1.)
- 8. The Royal University of Malta Commission (1973).
 See 7 above. p.1.

- 9. The Royal University of Malta Commission (1973)
 See 7 above. pp.11,111.
- 10. "Education Act No. XXXIX of 1974".
- 11. Act No XXII of 1976 Amendment to Education Act 1974.
- 12. The Royal University of Malta Commission XVth Report Part II, September 1974.
- 13. White Paper Tertiary Education: Proposed Reforms.

 Malta: Department of Information, 1978.
- 14. White Paper Tertiary Education: Proposed Reforms.

 See 13 above. p.3
- 15. White Paper Tertiary Education: Proposed Reforms.

 See 13 above. p.8
- 16. Draft Report on Some Restructuring Implications in Tertiary Education of the Student Worker Concept
 Association of University Teachers 1977.
- 17. "Education Act No XXI of 1978 dated 7th July 1978".

 In Supplement of the Government Gazette (Malta)

 No. 13, 508 Section A. Section 29 (1)

- 18. "Education Act No XXI of 1978". See 17 above. Section 29 (2).
- 19. Varley, D.E. (1978). Higher Education in Malta The Passing of the Royal University and the Launch of
 the "Worker Student System".

 International Association of University Professors and
 Lecturers.

 Bulletin No 9 Summer 1978.
- 20. Dahrendorf, R. Letter to the Prime Minister dated 6th June 1978.
- 21. Horlock, J.H. Letter to the Prime Minister dated 5th August 1978.
- 22. A Maltese Tragedy (1978). Leader in 'The Teacher' Organ of the Malta Union of Teachers. Nc 12 September/October 1978.
- 23. "Education Act No. XXI of 1980 dated 28th March 1980"
 In Supplement to the Government Gazette (Malta).
 No. 13, 715, Section, A.
- 24. "Education Act 1980 (Act No XII of 1980) Notice of Commencement". On Legal Notice 34 of 1980.
- 25. "Education Act No XII of 1980" See 24 above. Sections 29 (1) and (2).

Notes and References to Chapter 9.

- 1. Baldridge V.J. (1971) Power and Conflict in the
 University Research in the Sociology of Complex
 Organizations. New York : John Wiley and Sons.
- 2. Parkes, E. (1985) Letter to The Times, 4 September 1985.
- 3. <u>UGC Protects the Chosen Few</u> Leader in The Times Higher Educational Supplement.
 July 3, 1981.
- 4. Miller, D.C. (1983). <u>Handbook of Research Design and</u>
 Social Measurement. London : Longman.
- 5. Miller, D.C. (1983). See 4 above. p 72.
- 6. Bailey, K.D. (1982). <u>Methods of Social Research</u>. London : Collier Macmillan Publishers.
- 7. Bailey, K.D. (1982). See 6 above. p.8.
- 8. Miller, H. & Sammut, R. (1986). <u>Universities and the Labour Process</u>. <u>Some Case Studies from England and Malta</u>. Fourth U.M.I.S.T/ASTON Labour Process Conference Aston University April 1986

Notes and References to Chapter 10 .

- 1. Personal interviews with senior academic and administrative staff. 1985/86
- 2. Planning for the Late 1980's. Response from Aston
 University. Aston University November 1985
 P. 67.
- 3. Planning for the Late 1980's. See 2 above. P.1.
- 4. Higher Education. Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins. 1961-63. Cmnd 2154. London: HMSO (1963).
- 5. Miller, H. & Walford, G. (1985). <u>University Cut and Thrust</u>, in Walford, G (ed) Schools in Turmoil, Beckenham, England: Croom Helm.
- 6. Group interviews/discussions on developments at Aston.
- 7. Personal interviews with Dr. F. Gick, June 1985.
- 8. Keller, G. (1983). <u>Academic Strategy</u>. <u>The Management Revolution in American Higher Education</u>. Baltimore: John Hopkins University Press, P.138.
- 9. Keller, G. (1983). See 8 above.

- 10. Miller, H & Walford, G. (1985). See 5 above.
- 11. Crawford, F. (1982). <u>University of Aston. Annual</u>
 Report. 1982
- 12. Bosworth, S.R. (1985). <u>SALFORD</u> Special Report. The Times, 27th June 1985.
- 13. Personal interviews. See 1 above.
- 14. Walford, G. (1984). 'The Numbering of Postgraduate
 Research'. Higher Education Review, 16, (2), 61-65.
- 15. Personal interviews. See 1 above.
- 16. Gick, F. (1984). <u>Crawford's Plan</u>. Interview Birmingham Sun, 7th March 1984.
- 17. Planning for the Late 1990's. See 2 above. P2.2
- 18. Planning for the Late 1990's. See 2 above. P3.9
- 19. Personal interviews. See 1 above.
- 20. Planning for the Late 1990's. See 2 above. P3.3
- 21. Personal interviews. See 1 above.

- 22. The Development of Higher Education in the 1990's. Cmnd. 9524. London: HMSO.
- 23. Crawford, F. (1986) Aston Fortnight. Vol. 6. No. 6. 15th January 1986
- 24. Crawford, F. (1984) Aston Fortnight. Vol 4. No. 13 7th May 1984.
- 25. Crawford, F. (1985) <u>Hatchet Man Turns Hero? Moving</u>

 Aston to a Position of Leadership. Interview with the Birmingham Sun, February 1985.
- 26. Miller, H. & Walford, G. (1985). A Case Study of Financial Constraints in British Universities.

 University of Aston in Birmingham, England.
- 27. Parkes, E. (1985). 'Facts Behind the U.G.C. Financial Cuts. Letter to The Times, 4th September 1985.
- 28. Rogers, R. (1985). <u>The Slimline Tonic</u>. The Guardian March 1985.
- 29. Melville, D. (1959). Men who manage. New York: John Wiley & Sons. pp 263-4.
- 30. Argyris, C. (1976). <u>Increasing Leadership Effectiveness</u>. New York: John Wiley & Sons. p20-21.
- 31. Argyris, C. (1976). See 30 above. pp20-21

- 1. Venables, P. (1978). <u>Higher Education Developments</u>
 <u>The Technological Universities 1956-76</u>. London:
 Faber Press.
- Interviews with senior academic and administrative staff.
 1985.
- 3. Walters, G. (1966). A Technological University. An Experiment in Bath. Bath: The Bath University Press.
- 4. Interviews with senior..... See 2 above.
- 5. Taylor, B.J.R. (1982). The University of Bath in a National Context. Paper presented to the National Board of Universities and Colleges, Sweden. 30th March 1982.
- 6. Development Plan, Report No.1. University of Bath 1965.
- 7. Development Plan. See 6 above
- 8. The Administration. University of Bath. 1981.
- 9. Charter Statutes and Ordinances. University of Bath. 1981.

- 10. Taylor, B.J.R. (1977). Group on Forecasting and University

 Expansion. Interm Report of Conference of University

 Administrators. Shattock, M.L. (ed.). C/O Registry,

 University of East Anglia.
- 11. Taylor, B.J.R. (1978). Group on Forecasting and University

 Expansion. Final Report of Conference of University

 Administrators. Shattock, M.L. (ed.). C/O Registry,

 University of East Anglia.
- 12. Taylor, B.J.R. (1982). See 5 above. P.7.
- 13. Gick, F. (1984). <u>Crawford's Plan</u>. Birmingham Sun. 7th March 1984
- 14. Interviews with senior.... see 2 above.
- 15. Taylor, B.J.R. (1982). See 5 above.
- 16. Taylor B.J.R. (1982). See 5 above. P.24.
- 17. The UGC Protects the Chosen Few. Times Higher Educational Supplement, 3rd July 1981
- 18. Annual Report. 1982/83. University of Bath
- 19. Professor J. Quayle. 1984. Interview with Ngaio Crequer THES.

- 20. Parkes, E. (1985). <u>Facts Behind the UGC Financial Cuts</u>
 Letter to The Times. 4th September 1983.
- 21. Interviews with senior.... See 2 above.
- 22. Quayle J.R., <u>Planning for our Future</u>. Interview with the Vice Chancellor. Bath Report No. 1. May 1985.

NOTE: For a description of Bath's organizational framework
I am indebited to Moseley Mormoro - Planning in
Higher Education, A Comparison between developed and
developing countries problems - The British and Papua
New Guinea Experience. Thesis for degree of Master
of Science, University of Bath 1983.

The University of Bath Annual Reports 1978/85 University of Bath Calendar and Regulations Bath Report - University of Bath Publication.

Notes and References to Chapter 12

- 1. Mountford, J. (1972). Keele: A Historical Critique.
 London: Routledge and Kegan Paul
- 2. Perkins, H.J. <u>New Universities in the United Kingdom</u> University of Keele Prospectus 1986-87. p.4.
- 3. Mountford, J. (1972). See 1 above.
- 4. Harrison, D. (1981) Strategy for the Early Eighties.
 Report for discussion. University of Keele.
- 5. The Development of Higher Education into the 1990's.
 DES Cmnd 9524, London HMSO.
- 6. Vice-Chancellor's Report 1984/85. University of Keele
- 7. Fender, B. (1985). <u>Keele into the 1990's</u>. Talk given by the Vice-Chancellor to the Conference for Heads of School, University of Keele, October 1985.
- 8. University of Keele/North Staffordshire Polytechnic.
 Report of Working Party on Collaboration. November 1985
 P.1.

- University of Keele Gazette, Special Supplement,
 December 1985.
- 10. Report of the Steering Committee for Efficiency Studies in Universities. Committee of Vice-Chancellors and Principals, March 1985.
- 11. Personal interview with Professor Brian Fender.

 Vice Chancellor and Annual Reports 1977-84

 University of Keele Calendar and Regulations

 Appointments and Counselling Service Annual Reports

 Scythe Official Newsletter of Keele 1978-1985

 THES Article on Keele 18-5-84

 Personal interviews, consultations and group discussions.

Notes and References to Chapter 13

- 1. Colin, G. (1975) The Foundation of the University of Salford. London. John Sharatt & Sons
- 2. Venables, P. (1978) <u>Higher Education Developments</u>
 <u>The Technological Universities</u>. London: Faber.
- 3. Colin, G. See 1 above
- 4. Colin, G. See 1 above
- 5. University Planning to 1983/84 (1984/85) University of Salford 1981. p.15.
- 6. University Planning. See 5 above
- 7. Interviews with senior academic and administrative staff.
- 8. Ashworth, J.M. (1983) <u>Vice-Chancellor's Report 1982/83</u>
 University of Salford
- 9. Bosworth, S.R. (1985) The University of Salford Special Supplement. The Times 27th June 1985

- 10. Ashworth, J.M. (1985) Times Higher Educational Supplement. 3rd May 1985 p.5.
- 11. Wilby Peter; 'The business like don who slaughters sacred cows'. Sunday Times 20th January 1985.
- 12. Russell Swain; 'The School for experiment' The Times; Special Report 27th June 1985 p.15.
- 13. Parkes, E. <u>Facts behind The UGC Cuts</u>. Letter to The Times, 4th September 1985
- 14. Malcolm Long: 'Out of the blueprint, a unique scheme'
 The Times Special Supplement 27th June 1985 p.16.

The Vice-Chancellor's Report 1978/85
University of Salford Calendar 1978/85
Personal Interviews, Consultations and Group Discussions.

Notes and References to Chapter 14'

- 1. <u>Development of Higher Education into the 1990's</u>
 Department of Education and Science. Cmnd. 9524
 May 1985
- 2. Becher and Kogan (1980). <u>Process and Structure in</u> Higher Education. London: Hienemann.
- 3. The Royal University of Malta Commission. Chairman, Professor R. Dahrendorf. XVth Report Part 1, November 1973.
- 4. Debates of the House of Representatives (1st Session)
 4th Parliament, held on Monday 26th June 1978.
- 5. Report on Evaluation Worker-Student Scheme. Chairman, Professor G. Xuereb, Submitted to Minister of Education April 1985.
- 6. Debates of the House of Representatives. See 4 above
- 7. <u>Malta Guidlines for Progress</u> Development Plan 1981-1985. Economic Division, Office of the Prime Minister, August 1981.
- 8. Education Act No. XII of 1980 dated 28th March 1980 In Supplement to Government Gazette (Malta).
 No. 13, 715 Section A.

- 9. Report Evaluation Worker-Student Scheme. See 5 above
- 10. Becher and Kogan See 2 above
- 11. From the Rector's Notebook. The University of Malta Annual Report 1984.
- 12. Lewin, K. (1951) Field Theory in Social Science
 New York: Harper & Row
- 13. Lewin, K. (1951). See 12 above.
- 14. Gouldner, A.W. (1957) <u>Cosmopolitans and Locals</u>.

 <u>Towards an Analyses of Latent Social Roles</u>.

 Administrative Science Quarterly, 2nd December.

 pp 281 306.
- 15. Education Act No XII. See 8 above.
- 16. Becher and Kogan. See 2 above.
- 17. Report Evaluation Worker-Student Scheme. See 5 above.

- Robbins Report. Great Britain. Committee on Higher Education (1963): <u>Higher Education</u> Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins 1961-1963. London: HMSO, Cmnd 2154
- 2. Pratt, J. (1971). <u>Higher Education and the State</u>
 In Holmes, B. and Scalon, D.G. Higher Education in a
 Changing World. London: Evans.
- 3. Lockwood, G. and Pratt, J. (1985). The External Environment in Lockwood, G. and Davies J. (Eds). Universities: The Management Challenge.
 Guildford: SRHE & NFER NELSON
- 4. Lockwood, G. and Davies, J. (1985). <u>Universities: The Management Challenge</u>. Guildford: SRHE & NFER NELSON.
- 5. Keller, G. (1983). <u>Academic Strategy: The Management Revolution in American Higher Education</u>. Baltimore & London: The John Hopkins University Press.
- 6. Pfinster, A.D., & Finklestein, M.J. (1984). A Study
 in the Process and Consequences of Change Adaptation
 Liberal Art Colleges. Paper presented at the 6th
 International Conference on Higher Education at Lancaster
 University, August 1984.

- 7. Fielden, J & Lockwood, G. (1973). Planning and Management
 In Universities. London: Sussex University Press.
 P.22
- 8. See Notes and References to Chapter 4. Reference No. 12 P. 457
- 9. White Paper <u>Tertiary Education</u>. Proposed Reforms
 Department of Information, Valletta 1978.
- 10. Debates of the House of Representatives (1st session)
 4th Parliament, held on Monday 26th June 1978.
- 11. Davies, J. (1985) <u>Institutional Mission and Purpose</u>. in Lockwood, J. & Davies, J. See 4 above.
- 12. Lockwood, G. (1985). Planning in Lockwood, G. and Davies, J. See 4 above. p. 167.
- 13. Bennis, W.G., Benne, K.K. and Chin, R. (1969). The Planning of Change. New York: Holt, Rinehart and Winston, p. 259.
- 14. Faculty of Management Studies (1979). Five Year Plan.

 1979-84. Malta: The New University.
- 15. Keller, G. (1983). See 5 above. p. 97.

- 16. Becher, T., Kogan, M. (1980). <u>Process and Structure in</u> Higher Education. London: Hienemann
- 17. Clark, B.R. (1985). <u>Perspectives on Higher Education</u>. Berkeley: University of California. p.8.
- 18. Quayle, J. <u>A Classical Setting for a New Face</u>. Ngaio Crequer interviews Professor J. Quayle. Times Higher Educational Supplement. June 1984.
- 19. Lupton, A.M. (1980). <u>Nine Ways Towards Better Management</u>. Education Record. September 1980.
- 20. Lockwood, G. Davies, J. 1985. See 4 above. p. 330.
- 21. Parkes, E. (1985) <u>Facts Behind the UGC Cuts</u>. Letter to The Times. 4th September 1985.
- 22. Leader in Times Higher Educational Supplement. 27th September 1985.
- 23. Parkes, E. (1985). See 21 above.
- 24. Wilby, P. (1985). The Business Don who Slaughter Sacred Cows. Sunday Times, 20th January 1985.
- 25. Davies, J. (1985). The Agendas for University Management in the Next Decade in Lockwood, G., Davies, J. See 4 above.

- 26. Lockwood, G. (1985). Governance in Lockwood, G., Davies, J. 1985. See 4 above. p. 108.
- 27. Report of the Steering Committee for Efficiency Studies in Universities. Committee of Vice Chancellors and Principal. 1985. For Jarratt Committee criticism of committees in Universities, see page 98.
- 28. Report of the Steering Committee. See 27 above.
- 29. Trow, M. (1975). The American Experience of Low Growth
 Rates in Higher Education. Paper presented to the
 Conference on Implications of Low Economic Growth
 Institutions of Higher Education, London.
- 30. Sizer, J., (1982). <u>Institutional Performance Assessment</u> under Conditions of Changing Needs. International Journal of Institutional Management in Higher Education, OECDG, 1.
- 31. Clark, B.R. (1972). The Organisational Saga in Higher Education. Administrative Science Quarterly, June 1972.
- 32. Fielden, J. (1983). Strategies for Survival.
 In Morris, A. & Sizer, J. (Eds) Resources and Higher
 Education. Guildford: SRHE & NFER-NELSON.
- 33. Sizer, J. (1982). Assessing Institutional Performance and Progress. In Wagner, L. (Ed.). Agenda for Institutional Change in Higher Education. Guildford: SRHE & NFER-Nelsson.

- 34. Parkes, E. (1985). See 21 above.
- 35. Porter, D. (1970). Evolving Budgetary Practices in U.K.

 <u>Universities</u>. Paper presented to Second Southern

 Universities Management Programme. Anglian Regional

 Management Centre, May 1979.
- The Development of Higher Education into the 1990's. Cmnd. 9524. London: HMSO May 1985.
- 37. Debates of the House of Representatives. See 10 above.
- 38. Statement by the Minister of Health addressing Medical Students on 30th April 1986. The Times (Malta) 1st May 1986.
- 39. Carnegie Council on Policy Studies in Higher Education 1980. A Summary of Reports and Recommendations. San Francisco: Jossey - Bass. (See especially 'More than Survival', p. 45-46)
- 40. Keller, G. (1983). See 5 above.
- 41. Davies, J. (1985). See 25 above. See also Davies, J. & Morgan, A.W. (1982). The Politics of Institutional Change In Wagner, L. (Ed) Agenda for Institutional Change in Higher Education. Guildford: SRHE and NFER NELSON.

BIBLIOGRAPHY

Books

- Adams, R. and Chen, D. (1981). The Process of Educational Innovation. London: Kogan Page Ltd/The Unesco Press.
- Altbach, P.G. (1979). Comparative Higher Education.
 London: Mansell.
- Andrews, K. (1980). The Concept of Corporate Strategy.
 Homewood, Illinois: Dow Jones: Irwin.
- Ansoff, H.I. (1965). Corporate Strategy. New York:

 Mc Graw Hill.
- Archer, M.S. (1979). <u>Social Origins of Educational Systems</u>. London: Sage.
- Argyris, C. (1964). <u>Integrating the Individual and the</u> Organisation. New York: John Wiley & Sons Inc.
- Ashby, E. (1974). Adapting Universities to a Technological Society. San Francisco: Jossey-Bass.
- Astin, A. (1980). Three Thousand Futures. Carnegie Council for the Advancement of Teaching. San Francisco:

 Jossey Bass.
- Balderston, F.E. (1974). <u>Managing Today's University</u>. San Francisco: Jossey-Bass.
- Baldridge, J.V. (1971). <u>Power and Conflict in the University</u>
 New York: John L. Wiley & Sons.
- Baldridge, J.V. and others (1978). Policy Making and Effective Leadership. San Francisco: Jossey-Bass

- Becher, T. and Kogan, M. (1980). <u>Process and Structure in</u>
 Higher Education. London: Heinemann.
- Bennis, W., Benne, J. and Chin, W. (1978). The Management of Change. New York. Holt, Rinehart and Winston.
- Blau, P, (1973). The Organisation of Academic Work. New York John Wiley & Sons Inc.
- Bok, D. (1982). <u>Beyond the Ivory Tower</u>. Cambridge, Mass: Harvard University Press
- Brooks, G.E. and Rourke, F.E. (1966). <u>The Managerial</u>
 <u>Revolution in Higher Education</u>. Baltimore: John
 Hopkins University Press.
- Caine, S., (1969). <u>British Universities</u>. London: Bodley Head.
- Carter, C.F. (1980). <u>Higher Education for the Future</u>. Oxford: Basil Blackwell.
- Centre for Educational Research and Innovation (CERI/DECD)

 (1973). Case Studies of Educational Innovation. Paris
 OECD.
- Clark, B.R. (1984). <u>Perspective on Higher Education</u>:

 <u>Eight Disciplinary and Comparative Views</u>. Berkeley,

 Los Angeles: University of California Press
- Clark, B.R. (1984). The Higher Education System: Academic Organisation in Cross National Perspective. Berkeley & Los Angeles: University of California Press
- Clark, P.A. (1972). <u>Action Research and Organisational Change</u>. London, New York: Harper & Row, Publishers.
- Cohen, M.D. and March, J.G. (1974). <u>Leadership and Ambiguity</u>

 The American College President. New York: Mc Graw-Hill

- Dalton, M. (1959). Men who Manage. New York: John Wiley & Sons Inc.
- Derman Christopherson. (1973). The University at Work. London: SCM Press.
- Etzioni, A. (1964). Modern Organisations. Englewood Cliffs, N. Prentice Hall.
- Fielden, J. and Lockwood, G. (1973). <u>Planning and Management in Universities A Study of British Universities</u>.

 London: Chatto and Windus.
- French, W.L. and Bell, C.H. Jr. (1978). Organization Development. Englewood Cliffs, N.J.: Prentice Hall.
- Gray, H.L. (Ed.) (1982). The Management of Educational

 Institutions: Theory, Research and Consultancy. Sussex:
 The Falmer Press.
- Guest, R.H., Hersey, P. and Blanchard, K.M. (1977).

 Organizational Change through Effective Leadership.

 Englewood Cliffs, N.J.: Prentice Hall Inc.
- Halsey, A.H. and Trow, M.A. (1971). The British Academics.
 London: Faber and Faber.
- Herbert, T.T. (1981). <u>Dimensions of Organizational Behaviour</u>
 New York: Macmillan Publishing Co., Inc.
- Herzberg, F. (1976). The Managerial Choice: To Be Efficient and Be Human. Homewood, Illinois: Dow Jones-Irwin.
- Holmes, B. and Scalon, D.G. (1971). <u>Higher Education in a Changing World</u>. London: Evans

- Hopkins, D. and Massey, W. (1981). <u>Planning Models for Colleges</u>
 and Universities. Stanford University: Stanford
 University Press.
- Houghton, V., Mc Hugh, R. and Morgan, C. (1975). Management in Education Reader 1. The Management of Organizations and Individuals. London: Wardlock Educational in association with The Open University.
- Huse, E.F. (1980). Organization Development and Change. St. Paul, M.N.: West Publishing Co.
- Hutton, G. (1960). Thinking about Organizations. London: Tavistock Publications.
- Intergovernment Conference. Policies for Higher Education in the 1980's. Paris: OECD October 1984.
- Jacques, D. and Richardson, J.T.E. (1983). The Future for Higher Education. Proceedings of the 19th Annual Conference of the Society for Research into Higher Education 1983. Guildford: SRHE & NFER-NELSON.
- Jedamus, P., Peterson, M.V., and Associates (1980).

 <u>Improving Academic Management</u>. San Francisco: Jossey-Bass.
- Kast, F.E. and Rosenzweig, J.E. (1979). <u>Organization and Management: A Systems and Contingency Approach</u>. Tokyo: Mc Graw Hill Kogakusha Ltd.
- Katz, D. and Kahn, R.L. (1978). <u>The Social Psychology of Organizations</u>. New York: Wiley.

- Keller, G. (1983). <u>Academic Strategy: The Management</u>

 <u>Revolution in American Higher Education</u>. Baltimore:

 John Hopkins University Press.
- Kerr, C. (1984). <u>Presidents Make a Difference Strengthening</u>
 <u>Leadership in Colleges & Universities</u>. A Report of the Commission Strengthening Presidential Leadership.

 Funded by the Carnegie Corporation.
- Kerr, C. (1982). <u>The Uses of the University</u>. Cambridge, Mass: Harvard University Press.
- Knowles, A.S. (Ed) (1977). <u>International Encyclopedia of</u>
 <u>Higher Education</u>. San Francisco: Jossey-Bass.
- Leverehulme Report. Excellence in Diversity Towards a New Strategy for Higher Education. Guildford: SRHE: NFER/NELSON.
- Lewin, K. (1971). <u>Field Theory in the Social Sciences</u>. New York: Harper & Row Publishers.
- Livingstone, H. (1974). The University: An Organisational Analysis. London: Blackie & Son.
- Lockwood, G. and Davies, J. (9185). <u>Universities: The</u>
 Management Challenge. Guildford: SRHE NFER-NELSON.
- Mayhew, L.B. and Bennet, R. (1979). <u>Surviving the Eighties</u>. New York: McGraw Hill.
- March, J.G. (1965). <u>Handbook of Organisations</u>. Chicago: Rand Mc. Nally.
- March, J.G. and Simon, H.A. (1958). Organizations. New York: John Wiley & Sons.

- Mc Corkle, C.O., Archibald, S.O. (1982). Management and <u>Leadership in Higher Education</u>, San Francisco: Jossey-Bass.
- Miller, R.I. (1979). The Assessment of College Performance:

 A Handbook of Techniques and Measures for Institutional

 Self Evaluation. San Francisco: Jossey-Bass.
- Millett, J.D. (1962). The Academic Community. New York:
 Mc Graw Hill.
- Mingle, J.R. and Associates (1982). <u>Challenges of Retrenchment</u>. San Francisco: Jossey-Bass.
- Moodie, G.C. and Eustace, R.B. (1974). <u>Power and Authority</u> in British Universities. London: Allen and Univin.
- Morris, A. and Sizer, J. (1983). Resources and Higher Education. Guildford. SRHE & NFER-NELSON.
- Norris, G. (1978). The Effective University: A Management by Objective Approach. London: Saxon House, Trakfield Ltd.
- Olsen, J.P. and March, J.G. (1976). Ambiguity and Choice in Organisations. Bergen: Universitersforlaget.
- Onushkin, V.G., Ed (1974). Planning the Development of Universities III. Paris, Unesco Press.
- Owens, R.G. (1981). Organizational Behaviour in Education. Englewood Cliffs, N.J. Prentice-Hall, Inc.
- Perkins, J.A. (1973). The University as an Organisation.

 Carnegie Commission on Higher Education. New York:

 Mc Graw-Hill

- Peters, T.J. and Waterman, R.H. Jr. (1984). <u>In Search of Excellence</u>. <u>Lessons from America's Best-Run Companies</u>.

 New York: Warner Books.
- Pettigrew, A.M. (1973). The Politics of Organizational Decision Making. London: Tavistock
- Pfeffer, J. (1981). Power in Organizations. Marchfield, M.A.:
- Reports from the 1984 OECD/JAPAN Seminar on Higher Education Hiroshima City, Japan: Nishiki Printing Co. Ltd.
- Research Institute for Higher Education. Hiroshima University (1984)
- Richman, B.M. and Farmer, R.N. (1974). <u>Leadership, Goals and</u>
 Power in Higher Education. San Francisco: Jossey-Bass
- Robbins, Lord (1980). <u>Higher Education Revisited</u>. London:
- Roeber, R.J.C. (1973). The Organization in a Changing

 Environment. Reading, Mass: Addison-Wesley Publishing
 Company.
- Scott, P. (1984). The Crisis of the University. London:
- Shattock, M. (Ed.) (1983). The Structure and Governance of Higher Education. Guildford: SRHE & NFER-NELSON
- Shattock, M. and Rigby, G. (Eds.) (1983). Resource Allocation in British Universities, Guildford: SRHE & NFER-NELSON.

- Stein, R.H. and Baca, M.C. (Eds.) (1981). New Directions in Higher Education. San Francisco: Jossey-Bass.
- Stogdill, R.M. (1974). Handbook of Leadership: A Survey of Theory and Research. New York: The Free Press.
- Thomas, R.E. (1977). Business Policy. Oxford: Philip Alan.
- Three Thousand Futures. (1980). The Next Twenty Years in Higher Education. San Francisco. Jossey-Bass.
- Venables, P. (1978) <u>Higher Education Developments. The Technological Universities 1956 1976</u>. London: Faber and Faber.
- Verne, S. (1980). <u>Academic Adaptations: Higher Education</u>

 <u>Prepares for the 1980's</u>. San Francisco: Jossey-Bass

 Publishers.
- Wagner, L. (Ed) (1982). Agenda for Institutional Change in Higher Education. Guildford: SRHE & NFER-NELSON.
- Williams, G. and Blackstone, T. (1983). Response to Adversity.

 Higher Education in a Harsh Climate. Guildford:

 SRHE -NELSON.

Reports, Articles and Papers

- Ashworth, J.M. (1985). What Price an Ivory Tower?

 <u>University Industry Relationships</u>. Higher Education
 Review Summer 1985. pp 31-33
- Ashworth, J.M. (1985). <u>Tomorrow's Universities: Ivory</u>

 <u>Towers, Frontier Posts or Service Stations</u>. Cantor

 Lecture Royal Society of Arts, February 1985.
- Birley, D. (1984). The Management of Change. Paper presented to the Sixth International Conference on Higher Education. Lancaster University, August 1984.
- Brosan, G.S. (1978). Models of Management in Education.

 Paper presented to Second European Higher Education

 Management Programme. London: Anglian Regional

 Management Centre.
- Cameroon, K.S. (1978). Measuring Organizational Effectiveness in Institutions of Higher Education. Administrative Science Quarterly 23, December 1978.
- Cameroon, K.S. (1984). Organisational Adaptation and Higher Education. Journal of Higher Education No 55

 March /April P 125.
- Campbell, E.S. (1984). The Student-Worker Scheme at the University of Malta. University of Manchester:

 Department of Adult and Higher Education Ocassional Paper No. 12.
- Clark, B.R. (1972). The Organisational Saga in Higher Education.

 Administrative Science Quarterly. June pp. 179-184.

- Clark, B.R. (1983). The Contradictions of Change in Academic Systems. Higher Education 12 (1983) pp 101-116
- Clarke, A.M., Hough, M.J. and Stewart, R.F. (1984).

 <u>University Autonomy and Public Policies.</u> A Systems Theory

 <u>Perspective</u>. Higher Education 13 (1984) pp 23-48.
- Cohen, M.D., March, J.G. and Olsen, J.P. (1972). A Garbage

 Can Model of Organizational Choice. Administrative

 Science Quarterly 17. pp 1-25.
- Committee of Vice Chancellors and Principals. Report of the Steering Committee for Efficiency Studies in Universities. March 1985.
- Committee of Vice-Chancellors and Principals. The Future of Universities. November 1985.
- Craven, B.M., Dick, B. and Wood, B. (1983). Resource

 Allocation in Higher Education in Britain. Higher
 Education 12 (1983) pp 579-589.
- Cyert, R.M. (1978). <u>The Management of Universities of Constant</u>
 or <u>Decreasing Size</u>. Public Administration Review
 July/August 1978
- Department of Education and Science. The Development of

 Higher Education into the 1990's. Cmnd 9524. London:

 HMSO. May 1985.
- Dill, D. (1982). The Management of Academic Culture: Notes on the Management of Meaning and Social Integration.

 Higher Education 11 (1982) pp 303-320,.
- Ellstrom, P.E. (1983). <u>Four Faces of Educational Organization</u> Higher Education 12 (1983) pp 231-241.

- Evaluation Worker-Student Scheme. Réport submitted to Minister of Education: Committee Chairman Professor G. Kuereb, The University of Malta: April 1985.
- Fulton, O. (1984). Needs, Expectations and Responses: New Pressures on Higher Education. Higher Education 13 (1984) pp 193-223.
- Hosking, D.M. (1983). <u>Leadership and Effective Negotiation</u>
 of <u>Design Processes</u>. Paper presented to: Third
 Organizational Development World Congress, Dubrovnik,
 Jugoslavia, October 4-7th.
- Hosking, D.M. and Morley, I.E. (1984). <u>Decision Making and Negotiation, Leadership and Social Skills</u>, in Grunberg, M. & Wall, T. (Eds.). Social Psychology and Organization Behaviour. New York: John Wiley & Sons Ltd.
- Houghton, K. (1983). Managing Contraction in a Technological University. Coombe Lodge Report, Vol. 15, No. 11
- Lindsay, A. (1981). <u>Assessing Institutional Performance in Higher Education: A Managerial Perspective</u>. Higher Education 10 (1981) pp 687-706.
- Lupton, A.H. (1980). <u>Nine Ways Toward Better Management</u>. Educational Record Summer 1985. pp 19-23.
- Metzger, W. (1975). The Academic Profession in 'Hard Times'.

 Daedalus, 104 Winter 1975. pp 25-44.
- Miller, H. and Walford, G. (1985). A Case Study of Financial Constraints in British Universities. University of Aston in Birmingham.
- Milson, A.O'Rourke, A.R., Richardson, G.A. and Rose, H.F. (1983).

 Strategies for Managing Resources in a Declining Resource

 Situation. Higher Education 12 (1983) pp 133-144.

- Mintzberg, H. (1975). "The Manager's Job: Forklore and Fact".

 Harvard Business Review No. 53 (July-August) pp 49-61
- Moodie, G.C. (1983). <u>Buffer</u>, <u>Coupling and Broker</u>: <u>Reflections</u> on 60 Years of the UGC. Higher Education 12 (1983) pp 331-347.
- Morgan, A.W. (1982). College and University Planning in an Era of Contraction. Higher Education 11 (1982) pp 553-566.
- Peck, R.D. (1984). Entrepreneurship as a Significant Factor in Successful Adaptation. Journal of Higher Education, No 55 (March/April) pp 269-285.
- Pfinston, A. and Finklestein, J. (1984). Adaptation in the American Liberal Art Colleges A Study in the Process and Consequences of Change. Paper presented at the Sixth International Conference on Higher Education. Lancaster University, August 1984.
- Sadlak, J. (1978). Efficiency in Higher Education Concepts and Problems. Higher Education 7 (1978) pp 213-220.
- Schroeder, T.D. (1982). Comprehensive Planning for Higher Education. International Association of Universities Bulletin. Vol. XXX no. 4. pp 263-264.
- Shattock, M. (1982). How Should British Universities Plan for the 1980's? Higher Education 11 (1982) pp 193-210
- Simon, M. (1967). The Job of a College President. Educational Record, No. 58. Winter pp 68-79.
- Sizer, J. (1979). Performance Assessment and the Management of Universities for the 1990's. Paper presented at the Conference of University Administrators. Edinburgh University, April 1979.

- Squires, A. (1983). <u>Innovation Through Recession: An Overview</u>
 Studies in Higher Education. Vol 8. No. 1.
- Taylor, B.J.R. (1982). The University of Bath in a National Context. Paper presented to the National Board of Universities and Colleges, Sweden, March 1982.
- Telem, M. (1981). The Institution of Higher Education A

 Functional Perspective. Higher Education 10. (1981)

 pp. 581-596.
- Thomas, R.E. (1980). <u>Corporate Strategic Planning in a University</u>. Long Range Planning Vol. 13. October 1980.
- Toll, J. (1982). <u>Strategic Planning: An Increasing Priority</u>
 <u>for Colleges and Universities</u>. Change, No. 14. May-June
 pp 36-37.
- Trow, M. (1975). The Public and Private Lives of Higher Education. Daedalus Winter. pp 113-127.
- Weick, K.E. (1976). Educational Organizations as Loosely
 Coupled Systems. Administrative Science Quarterly.
 No. 21. March. pp 1-19.