Academic Management — The Case for Challenge*

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ABSTRACT

An examination was made of how well certain units involved in managing the teaching-learning organizations of universities work. Criteria for acceptable operation involved clarity of communication, matches between objectives at different levels of the administrative hierarchy, matches between objectives and methods, and rationality of approach to cost-effectiveness. Significant defects were found in relation to each of these criteria suggesting that both selection and training of staff at all levels are now, to some degree, deficient. Inefficiencies relating to poor information gathering, and poor communication were identified as was unnecessary duplication between faculty and department organizations.

RÉSUMÉ

Nous avons examiné l'efficacité de divers organismes qui gèrent les modalités de l'enseignement et des études au sein des universités. L'opération jugée acceptable devait répondre aux critères suivants: 1) clarté de la communication, 2) correspondance des objectifs à divers niveaux de la hiérarchie administrative, 3) corrélation entre les objectifs et les méthodes, 4) rationalité envers les questions de coût et d'efficacité. Pour chacun de ces critères, nous avons découvert des discordances importantes — ce qui semble indiquer une déficience actuelle dans la sélection et dans la formation du personnel, à tous les niveaux. Ces discordances résultent de la faiblesse des méthodes d'information, du manque de communication, et du fait que, inutilement, les organismes à l'intérieur de la faculté font double emploi avec ceux des départements.

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INTRODUCTION

This paper argues that a good management system for academic programs requires better communication and collaboration than now exists among the various persons and organizations involved. The argument is based on an examination of the relationships and attitudes of students, teachers, and administrators, and the manner in which day to day decisions on courses, programs, and personnel are made. Our emphasis differs considerably from that of Perkins (1973) who discusses the university as an organization. It differs also from that of most of the authors who write on improving academic management in Jedamus and Peterson (1980), although there is, naturally, some overlap, especially in the chapters of that compendium dealing with the improvement of teaching and the planning and evaluation of academic programs. There is also material bearing on our survey and arguments in the literature dealing with staff development (Teather, 1979).

Perhaps the most useful reference for our project is Becher and Kogan's (1980) book "Processes and Structure in Higher Education". In this, they draw a distinction within the university system between the values on which it is based including general aims and more specific objectives, and the practical process of implementing these values. The first of these they refer to as the normative mode; the second as the operational mode. Although the distinction between them is not always clear-cut, nonetheless, they have provided us with a useful basis for analysing the interactions between intention and achievement that we have identified at different levels of the management hierarchy. Becher and Kogan see this hierarchy as consisting of four levels – the individual, the basic unit, the institution and the central authority. For our study, we found the concept of the basic unit of particular value. In its normative role its main function is to maintain and develop group norms which include the communal aims and objectives referred to earlier. In operational terms, its concern is with the implementation of everyday practice in its fields of teaching, research and administration. Although Becher and Kogan refer to the basic unit in only a general sense, they imply that, in the university structure, the Department usually conforms most closely to this description. Our findings support their view and it is in this sense that we have used the term Department throughout this paper.

Reference should also be made to the work of Startup (1979) who studied the whole range of teaching activities by means of questionnaires and interviews in a single university college. Again Watson (1979) confined his attention to departmental heads or chairmen and the extent to which Faculty opinion on their role is influenced by discipline, sex and nationality. A somewhat similar study by Konrad (1980) was confined to deans within a wide range of establishments of higher education.

ORIGINS OF THE STUDY

The study developed from earlier work on course evaluation and management of change (Dowdeswell and Good, 1978, 1979). In the evaluations mismatches between

staff in their attitudes to course aims became apparent, as did the absence of departmental policy on some issues, and mismatches between course aims and departmental policies where such could be identified. Clearly a course needs to be looked at in a departmental context. We decided therefore to explore departmental management. This was done for two departments only in one Ontario university looking primarily at the roles and inter-relations of student, staff and chairmen.

The evaluation of courses had raised the question of inter-departmental coordination i.e. the faculty level. The examination of departments also pointed up the importance of the faculty, especially in establishing reward systems, assessing staff, and distributing resources. It seemed therefore most useful to broaden the study to include the course, the department and the faculty as levels within the administrative hierarchy and the teachers, departmental chairmen, (or heads) and deans, as providers of appropriate inputs to these levels and as mechanisms for information flows between them.

Although this study draws on work done over a period of 6 years, some of which has been published, it is not a longitudinal study concerned with change over that period. Rather it assumes that conditions have changed little with regard to the processes concerned so that data from all the studies may be considered relevant. However, essentially all the data presented herein are based on interviews conducted in 1980, with a few carried over into 1981.

THE PROBLEM AREAS

Academic programs of universities bring together the work of students, teachers, departmental heads, senior administrative officers, and senates. The management of the whole system is based on decisions made by each of these groups which are, to some degree independent, and to some degree parts of a network and hierarchy.

Such a complex system, and especially one which values a large measure of autonomy of the parts, is unlikely to work effectively without a substantial measure of agreement on aims among the parts and levels, and effective communication between parts. It is also inherently susceptible to waste through unnecessary overlap of effort. The operation of the system needs, from time to time, to be critically assessed in relation to these potential problem areas.

The decisions made in managing an academic system are often based on stated rationales open to inspection by all involved and intended to achieve identifiable, if not always clearly specified, objectives. They may, however, still be negligent because the whole range of relevant issues is not considered. Other decisions, for example those not to do something, (as for example when no review is made of coordination between courses, or of whether staff perform well or badly in certain roles) may, in effect, be hidden from those who should participate in making them. Another, at least partially hidden decision is that implicit in pro-rata cuts — which imply that all the activities involved have been given equal priority.

This study is concerned therefore not only with the way in which decisions are made, by whom, and on what rational basis, but also with problems of

information — both its gathering and transmission. Our concern is not to estimate the size or importance of problems, much less to prescribe cures, but rather to identify some of the places where problems can be shown to exist.

Three levels of the hierarchical organizational system have been looked at: courses, departments, faculties. These are the units in which most of the teaching, learning, and assessing go on. Students have been consulted in relation to these three levels, but we have not attempted to address the complex issues of student management of their own efforts.

The issues which we believe to be central to a critical review of academic management at these levels can be put in the form of four questions. The first two deal with coordination within the system, the last two with optimal use of resources. The questions could be cast in these more general terms but our intent has been to address rather specific issues. A generalized rationale for the need to match objectives, and models (at different levels in a hierarchy) is provided in Good and Harmsen (1979). The four questions are:

- 1. Are the objectives clearly stated? That is to say is communication on aims clear enough to provide a basis for effective collaboration and decision making?
- 2. Is there a match between objectives at different levels? i.e. is there a basis for collaboration and substantial absence of a basis for conflict?
- 3. Is there a satisfactory match between objectives and methods? i.e. can reasonable success in achieving objectives be expected from the methods currently in use?
- 4. How carefully are costs and effectiveness weighed? Since accountability demands a look at efficiency (which because we see the educational output as necessarily incorporating due allowance for objectives, we view as essentially the effectiveness/cost ratio), and since this ratio will change if either cost or effectiveness changes, there can be no accountability without equal attention to both.

RESEARCH METHODOLOGY

The data presented in this study are derived from interviews with students, staff, department chairmen, and deans from 5 Ontario universities. These will not be identified because it was agreed at the interviews that the information obtained would not be related to specific institutions or people. The Universities chosen included large and medium sized ones which were judged likely to have a clear cut department-faculty relationship. Both long established and newer institutions were included.

For each university an approach was made to an individual who was in a position to arrange both for approval of the visits and for selection of those to be interviewed. Three deans and three department heads or chairmen were to be selected by this contact person, the only suggestion given being that very small faculties which had little departmental structure, or graduate faculties, would be less appropriate for our study.

In the event, the deans interviewed, represented faculties of Biological Sciences (3), Social Sciences (2), Applied Science (2), Arts and Science (4), Physical Sciences (2), Humanities (1) and Education (1) to give a total of 15. The chairmen or heads represented Departments of Anthropology (1), Chemistry (1), Sociology (2), Engineering (3), Zoology (1), History (2), Psychology (1), English (1), Fine Art (1), French (1), Physics (1). These lists show that there was wide distribution over the subject areas which account for most of the undergraduate teaching program, and good concordance between the subject areas covered by the departments and the faculties studied.

The interviews were centred on a questionnaire. Both interviewer and respondent had copies before them. As each question was presented, and if necessary discussed, the interviewer entered the response. The interviews were conducted by one of the authors except for 3 which were very kindly done by Julia Matthews of the Office of Teaching and Learning of the Council of Ontario Universities. This rather demanding method of personal interview had, however, been shown to be necessary by pre-tests of the questionnaires in which some questions were misconstrued.

The questionnaires, which ran to 7 pages are not presented here in extended form. The questions and responses bearing most directly on the problems examined are however given explicitly, or indicated clearly, in the discussions of the four questions posed above. In most cases the number of responses equals the number interviewed but occasionally a question was not answered.

The student sample to which brief reference is made, was of 20 students, 10 drawn from each of the two departments in the same university (Biology and Geography) examined in relation to student-staff-chairman relationships. The same type of interview with questionnaires was used for the students though the discussion in this paper draws also, to some extent, on the more extended student interviews of previous studies.

1. Were the objectives clearly stated and communicated?

There are two different but related issues here: the clarity of the intentions and the extent to which they are understood at different levels in the hierarchy, and applied to academic management decisions.

Nine of fourteen deans indicated that they expected departments to have written objectives, and eight of the nine expected these to be submitted to their office. Eleven of the 15 heads responding said that there was a mechanism in their department for determining staff views on departmental teaching objectives. Clearly there was substantial agreement at departmental and faculty levels regarding the desirability of objectives in some form or other.

Consistent with this view of the place of objectives in guiding the work of staff the deans responded to the following questions as indicated.

When courses in your faculty are to be designed, is a written statement provided of departmental and faculty expectations with regard to:

- (a) information (i.e. course content)? (Yes 13: No 1)
- (b) concepts and approaches? (Yes 12: No 3)
- (c) skills to be acquired by students? (Yes 13: No 2)
- (d) student attitudes? (Yes 7: No 7)

The deans responses show that both deans, and by implication heads, were under the impression that faculty and department views were being effectively transmitted to those concerned with course design.

However, the extent to which such expectations had reached staff members and been acted upon by them is given by their answer to the question:

When you were designing these courses did you receive a written statement of departmental expectations with regard to:

- (a) information (Yes 4: No 25)
- (b) skills (Yes 1: No 28)
- (c) student attitudes (Yes 1: No 28)
- (d) concepts and approaches (Yes 2: No 27)

Subsequent interviews confirmed that the design of new courses, or the adjustment of existing ones, was almost entirely individual lecturers' responsibility; a view shared by the majority of students.

Discussions with deans and heads served to throw some light on the reasons for this failure of communication. It soon became clear that the concept of objectives was open to a wide range of interpretation. Some saw them as precise educational entities which could be used as criteria for rigorous student assessment. For others they represented statements of general intent (aims) permitting considerable latitude of interpretation. Others, again, viewed objectives in such vague terms that they amounted to no more than pious hopes which were likely to serve little useful purpose and might well have promoted the confusion we found. Evidently, the level of obscurity in the statement of intentions was high.

There is no doubt that written departmental objectives were submitted to the faculty office from time to time as the answers to the first question indicated. But in discussions with deans, the strong impression emerged that many of these objectives related to specific courses defined only to the level provided in calendars, and that attempts to approve and assess programs in terms of departmental aims (strategy) were haphazard at best. Explicit objectives for the faculty level of organization were largely absent except for those relating to a vague idea of coordination.

2. Was there a match between objectives at different levels?

Our concern here was with the normative mode and the extent to which groups at different levels of the same organization shared common objectives which were comprehensible to all. Thus, at department level, there was a close concordance of views between staff and students regarding the design of courses in Biology and Geography. There was general agreement that the most important abilities to be

developed in students were data collection and presentation, data analysis, problem identification and solving, communication, and a broad approach to the subject. However, geography staff rated simulation skills as of more importance than did biology, and this difference was also reflected in the student ratings.

There was not in our survey much basis for concern over a mismatch in objectives between students and staff, nor in general among staff. However, the failure of communication in relation to course design shown in the previous section might have been expected to give rise to problems and has, indeed, been found to have done so. A case history is presented in Good and Harmsen (1979).

In another important area of management mismatch also occurred between the objectives perceived at different levels. This was in the assessment of staff for merit awards or promotion. Of 18 criteria suggested as a possible basis for judging staff, the number of publications was ranked by both Deans and Heads as 10th. Although a variety of schemes existed for weighing the relative contributions of teaching, research and administration, discussions revealed the widespread view among many staff that the number of research papers (not necessarily their quality) tended to be the principal criterion used in judging merit. There could be two reasons for this discordance of views:

- (i) The individual inclinations of staff composing the assessment committees being inconsistent with Faculty policy.
- (ii) The fact that information on teaching and kindred criteria tends to be more diffuse and difficult to obtain with any precision than that on research. There was some evidence that a lack of familiarity with methods of analysis of the components of teaching on the part of deans and department heads was a more serious problem than the difficulty of obtaining the necessary information, and this may well have exerted an appreciable effect in promoting the mismatch that we observed.

3. Was there a satisfactory match between objectives and methods?

Whereas in the previous section we were concerned only with the normative mode, here we consider the relationship between the normative and the operational and their interaction in achieving stated and implied objectives.

A particular aspect of these objectives in relation to course planning concerned those courses taken by students in departments other than their own. Here, the views of deans and heads were in accord in emphasizing the need for close cooperation between the different staffs concerned. Twelve of fifteen deans considered it highly important that representatives of a department participate in design and assessment of courses taken by students of that department in other departments, as did eight of fifteen heads.

But the extent to which cooperation actually occurred at staff level was another matter. In the two departments investigated which appeared in no way atypical in their conduct and organization, 26 out of 30 staff members asserted that they had not been involved at all. There is here quite clearly an objective

of coordination between departments which, in spite of the existence of faculty committees has in place no effective method for achieving it.

In the assessment of students, a match between objectives and methods is clearly important when examinations are conducted.

Both deans and heads were asked:

How highly do you rate the need for,

- (a) providing students with a list of examinations and exercises to be tested, with weighings?
- (b) a list of performance criteria with weighings? (e.g. factual recall, analytic skills, problem solving)

The answers to (a) showed 10 of 15 deans, and 12 of 15 heads rating it as highly important. Indeed, in the universities that we visited, the provision of such information for students was usually a Faculty or Senate requirement.

But views on question (b) were more equivocal, only 8 out of 15 deans and 10 out of 15 heads rating "high" the need to provide a list of performance criteria with weighings. Yet, it is on just such criteria that students are to be assessed. The argument frequently used in support of withholding such information — that access to past examination papers could provide it, is hardly valid, for this leaves the initiative with the examiner to alter the balance of a paper without notice. In the two departments studied in detail, 28 out of 30 staff stated that a list of examinations with weighings was supplied to all students, a claim fully supported by the students themselves (20/20). Regarding performance criteria, while 20 out of 30 staff maintained that these were also provided, only 4 students out of 20 confirmed that this was so. Clearly, there was a significant mismatch here between the objective of giving students a clear statement of what was expected of them and the means to this end.

Another aspect of student assessment concerns the setting of examinations where there is clearly an implicit objective of assessing students fairly and in relation to the course objectives.

Eight out of 30 staff of the two Departments studied stated that the papers they set were not scrutinized in draft by another colleague prior to their publication for use in student assessment. The risks involved in such a lax procedure are considerable (Rowntree, 1977). A limited comparison in one department of a sample of course outlines (objectives) with subsequent examination papers based upon them (for one year only) revealed in most instances a high degree of concordance. However, in a few the level of agreement between objectives and questions was a good deal lower. For instance, a course claiming to be concerned with analytic skills was assessed almost entirely in terms of factual recall.

Regarding the evaluation of individual courses, there was universal agreement either stated or implied that this should be done and a variety of methods were in use for the purpose. One of these is the joint staff-student questionnaire, a method which seems almost mandatory given the high interest which both staff and students have in course quality. However, although 7 out of 13 deans and

9 out of 14 heads rated such questionnaires as of "high" value staff-student questionnaires were ranked as the lowest frequency of actual use by deans and lowest but one by heads. In spite of the sometimes exhaustive efforts of Department Student Committees, the value of student designed questionnaires was considered to be relatively low, only 1 Dean out of 15 and 2 Heads out of 15 rating them as more than of "medium" importance.

Examination of a number of these questionnaires, also discussion with the students concerned, showed the predominant emphasis to be on the characteristics of lecturers and aspects of the curriculum of only a general kind. Evidently, the students had received no guidance regarding the kinds of information which could lead to useful curriculum change. It was small wonder, therefore, that both staff and students amply confirmed our impression that the influence of student opinion derived from their questionnaires had been minimal.

Another area examined was that of staff assessment with particular reference to teaching performance, and the implicit objective of improving such performance. Nine of 15 deans, and 8 out of 15 heads stated that some help in improving teaching skills was provided for new staff, while for those who had received adverse reports, 7 out of 15 deans and 13 out of 15 heads claimed that facilities for further training were provided. However, discussions showed that more often than not the only help actually given was a discussion with the Head, Dean, or some other senior member of staff which amounted to little more than a gesture. Such few facilities for training as were provided were usually organized under university arrangements. In this connection, it is worth noting that in 4 out of 15 faculties, some attempt was made to provide training for department heads and chairman, again using university facilities.

Turning to the design of the curriculum, investigations at Department level showed that the initiation and design of new courses, also the adjustment of existing ones, tended to rest with interested groups of staff or individuals with little input from heads and deans. Methods for clearer expression of leadership in academic matters by these officers are clearly needed.

There was substantial agreement at both levels (26/30) that when changes in course programs were made it was desirable to include a scheme for evaluating their success. Yet 11 of 15 deans rated as "low" the frequency with which such built in evaluation schemes was used, and only 7 out of 15 heads stated that their departments normally followed these procedures.

4. How carefully were costs and effectiveness weighed?

The question of costs and effectiveness, and the attitudes of management to them was approached directly by asking heads and deans how important they regarded cost effectiveness as a basis for adjusting programs, and indirectly by considering whether programs on which they expended considerable efforts appeared to be effective.

In the direct approach 3 deans and 3 department heads of the 30 questioned rated cost effectiveness low as a basis for modifying programs and 11 more gave

it a medium rating. Only 13 considered it of high importance and a number of these expressed the view that they gave it such a high rating with reluctance — that, while present retrenchment might force it to the fore, it was not as important as the present situation made it seem. Clearly, the group of university officers we met had not come to see that accountability requires equal attention to costs and to effectiveness. Costs are today on every mind but effectiveness is inevitably beclouded by the vagueness in objectives to which we have alluded.

The indirect approach to examining how cost effectiveness was viewed involved looking at a variety of activities which related either to standards of performance, or to efficiency of operation, or both. Some of those we shall now discuss from the resource viewpoint, have already been considered in relation to the aimsmethod match. Assessing staff and evaluating courses are two such activities which are carried out on a regular basis. They were, both explicitly and implicitly, rated important by deans and heads.

Clearly, the assessment of staff, at least in relation to teaching, can be done adequately only when the course evaluations are conducted critically. Yet, as we have seen earlier, the procedures for course evaluation were less than ideal when judged by the standards of deans and heads (see evaluation of courses in 3 above). There was, in addition, a haphazard use of the information gathered. Six out of 15 heads reported no formal system for assuring action when an evaluation indicated a need. The resources, whether of student time, staff effort, or scrutiny of results were not likely to be cost effective under these conditions.

Staff assessment was clearly regarded as an important activity by both heads and deans — presumably both to gauge merit awards and to provide guidance to staff in their career development. Two questions arise here. Are staff assessment procedures comprehensive and adequate? Are they carried out at reasonable cost?

Valid assessment of staff requires due process which weighs every relevant factor. However, when 30 heads and deans were asked whether they gathered information on staff with regard to the 8 attributes relating to teaching discussed below, it was clear that a good many attributes received scant attention.

For example, only one of 30 considered it highly important to determine whether an instructor had in his course pursued all the objectives assigned. Seventeen rated this information of medium or low importance and twelve gathered no information on this aspect of a teacher's work.

Six of the 30 gathered no information on the ability of a teacher to organize a teaching program (as opposed to delivering it), and six more rated this attribute as of medium or low importance. However, only three failed to gather information on lecturing skill and twenty rated it highly important.

Less than half (14 of 30) heads and deans rated it highly important that staff assess students in a manner appropriate to the objectives of the course and four of the group collected no information on this point.

It was generally agreed that playing an active role in course evaluation and applying the results of evaluation to course revision were important staff activities

but in both cases 5 of the 30 respondents collected no information bearing on these issues. Adequacy of feedback to students was widely regarded as important and data on this were collected by all but one respondent.

A question about the importance of a staff members knowledge of the variety of educational procedures available showed only 8 of 30 regarding this as important. This question caused some difficulty and almost always had to be explained. Clearly, few were familiar with or had considered such matters as project work, independent study, Keller plan, or learning syndicates or the relative advantages of lectures and other modes of instruction.

The responses obtained cast doubt on the adequacy of the information gathered for staff assessment. We have referred earlier to the evidence of a high level of agreement with the idea of objectives, and to the fact that deans and heads were disposed to believe that staff do receive clear indications of what they are supposed to achieve in their courses. Agreement on the organization of a teaching program and pursuing all the objectives, indeed on all the issues listed above, might therefore have been expected. It could be argued that ignoring any of these must lower both the credibility and the appropriateness of the final judgement.

If the effectiveness of staff assessment is low by reason of ignoring relevant attributes, the costs are high. Staff assessment is a feature of most departments and faculties, on a yearly basis. It can hardly be argued that staff merit changes so rapidly that assessments are needed so frequently. One review in three years would seem ample. Waste from an undue frequency of assessment is the more regrettable because those assessments which are made are deficient. A system in which neither the effectiveness, nor the costs, can be justified needs to be challenged.

In the coordination of courses and programs a situation was also found in which neither costs nor effectiveness seemed to be closely monitored. All activities of staff members must be seen as absorbing resources. This is as true of committee work as of teaching or research. Normally, both faculties and departments have curriculum committees, both of which review new courses. When deans were asked how important it was to have representatives of a department participate in the design and assessment of courses in other departments 12 out of 15 considered it highly important. Eight of 15 heads agreed. However, 26 of 29 staff reported that they had never had any involvement in either design or assessment of courses in other departments and 20 of 30 said they had had no liaison with other staff in their own department via a committee. In an earlier study by Dowdeswell and Good (1979) questions coordination at the faculty level were raised and "the faculty committee was judged ineffective in providing coordination".

The picture that emerges is of a coordination system which exists but which has little effect at the level at which courses are actually designed. Such coordination as now occurs appears to arise chiefly from the structure of the discipline and from casual staff consultations.

Another important part of a critical appraisal of cost-effectiveness is an examination of procedures which have grown up and worked fairly well, but which have fundamental weaknesses that can sometimes do much harm. One of these on which we obtained data is the procedure for selecting heads or chairmen. By extension, it is likely to apply to staff in general from the newest recruit upwards.

Of 20 roles of heads listed in our questionnaires, none was rated unimportant by any dean and 18 were rated highly important by more than half. It is, therefore, surprising that 8 of 15 deans reported that committees to select chairmen for their faculties did not have any system for defining and weighing criteria for selection. Nor, by implication, was there any system for gathering information relevant to how candidates would perform in their different roles. The parallel between this situation and the one described in relation to staff assessment is striking. Both involve a casual, and therefore potentially faulty, procedure based on incomplete analysis. The implications for cost effectiveness are profound, even if somewhat indirect.

A rather different situation and one more clearly involving direct costs can be seen in relation to the division of resources and work among levels of the administrative hierarchy. We have looked particularly at the department-faculty relationship.

Deans and department heads were asked to rate 20 specific functions of heads on a scale of importance. They did so with almost identical patterns for the two groups and with a great deal of similarity within groups. When the roles of heads were compared with those of deans, as seen by themselves, there was strong repetition of certain activities such as budget planning, acquisition of resources, staff development, curriculum innovation, coordination of staff activities and staff selection and evaluation. Indeed, there was a striking absence from the deans' outline of their own roles, of activities which indicated that the faculty had any major normative role which was distinct from the department. This absence could, with the general scheme of Becher and Kogan, be used to challenge the need for both levels in the hierarchy. Their account of the department as being close to the basic unit suggests that it should be regarded as the more essential of the two. An examination of the respective roles played in course design, teaching, assessing students and research supports this view. Indeed Konrad (1980) concludes "it is a myth that decisions in the deanship are primarily based upon substantive matters of an academic nature...". These considerations, plus the fact that some heads reported to us that decisions they made on the basis of detailed knowledge and a careful rationale had to be defended at the faculty level which was more remote and perhaps less qualified to judge, raises the possibility of considerable waste of resources through the overdevelopment of faculty organizations. This is not to suggest that all redundancy can be avoided in a hierarchical structure, but since some universities in which the authors have worked function well with a much simpler and cheaper organization at faculty level than do others, there is a possibility of considerable saving from a simplification of the management structure.

GENERAL IMPLICATIONS

Academic management has grown up in most universities without much challenge. Even a cursory examination reveals that deficiencies can be found, for example in poor communication between one level and another, a failure to match aims and methods, a failure to use available information and a redundancy of effort. The fact that the system manages to work is hardly a defence of institutions which try to inculcate responsibility and a desire for excellence.

Most of the problems we have identified relate to failure to take into account the full range of issues relevant to a decision. This seems most likely to arise not from irresponsibility, but from the fact that academic staff are specialists — but not in all the roles in which they must perform. It follows that there is a need for them to develop a competence in the full range of professional activities which constitute the life of a university. This process is commonly known as staff development. All too often it is seen as just a training in teaching procedure but, as our account has shown, it ranges much wider into such fields as assessment, evaluation and communication. As has been pointed out by Harding et al. (1981), professional growth depends upon many factors including personal determination to sieze such opportunities as are available, support facilities, good management and imaginative leadership.

Among the most pressing demands on academic leadership are a deeper understanding of all the roles that staff have to play and the operation of a reward system which encourages development in all these areas while also providing for some specialization. It is unlikely that the staff member who is concerned to keep up with research on the relative advantages of various teaching methods, or who is much concerned with strategic decisions in the design of a degree program in, say, chemistry will also be a prolific publisher of chemical research. This needs to be recognized and those concerned treated more fairly than they now seem to be on the basis of our survey of criteria used for assessing staff.

This survey, though not extensive, provides several challenges to the system. These challenges are based on analyses of specific day to day decisions and operations. The implications for staff development programs at all levels are not in conflict with those raised by Fisher (1978) in relation to the development and assessment of academic leadership but may, by virtue of greater specificity and relation to practice, prove more useful in developing training or assessment programs. The survey could also be used as an answer to those who have recently terminated, or are considering discontinuing such programs.

If we were to offer one challenge to current academic management it would be based on the way in which the coordination and evaluation systems function — how far they fall short of the expectations of those very people who make up the system.

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