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# Managing the Effective University

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# Invited Contribution

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Paul Ramsden's *Learning to Teach in Higher Education* (Routledge, 1992), is one of the world's most popular books on teaching in higher education. A complementary volume, *Learning to Lead in Higher Education*, appeared in 1998.

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# Managing the Effective University

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ABSTRACT *Universities face an almost certain future of relentless variation in a more austere climate. Changes in the environment—mass higher education, knowledge growth, reduced public funding, increased emphasis on employment skills, pressures for more accountability have been reflected in fundamental internal changes. One result has been a growing sense of disillusionment among academic staff. At the same time, standards of research and teaching have come under increasingly close examination, while inter-university competition has never been greater. Evidence from several investigations points to the crucial role of academic leadership in maintaining morale, enhancing productivity, and helping staff to welcome momentous change. Tomorrow's effective universities will require academic managers whose leadership qualities resemble those of good teachers in higher education.*

## Introduction

> The expansion of universities is one marked feature of the social life in the present age. All countries have shared in this movement .... It is, however, possible to be overwhelmed even by the gifts of good fortune; and this growth of universities, in number of institutions, in size, and in internal complexity of organization, discloses some danger of destroying the very sources of their usefulness, in the absence of a widespread understanding of the primary functions which universities should perform in the service of a nation.

These words were spoken 70 years ago by Alfred North Whitehead, physicist, mathematician, and one of the great writers on science and education, when he opened the Harvard Business School. The expansion of universities is as much a feature of life today as it was in 1928. The problem of how to maintain their usefulness and understand their functions is, if anything, even greater.

The thesis of this article is that the qualities of good management in a university, especially at head of department level, mirror those of good teaching in higher education. Teaching and learning are about change, and the effective university at the turn of the twenty-first century will be the university that can manage it. The

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effective academic manager will be the person who can lead his or her people through change.

To succeed in this environment, managers and universities will need a second key attribute to set beside their capacity to handle change positively. They will require a clear grasp of "the primary functions which universities should perform in the service of a nation"; for as Whitehead also said: "The proper function of a university is the imaginative acquisition of knowledge". I take this to mean that it will need to produce, in all its endeavours, the qualities of excellence; for only that will guarantee its competitive position. It will have no fear of tighter monitoring of standards. It will welcome public scrutiny of its excellence, and it will delight in throwing off the self-forged shackles of cloistered narrowness.

What is needed to make a university both accomplished at handling change, and capable of producing excellence? We cannot answer this question until we clarify the question of what higher education is for.

Probably the least pretentious recent answer came from the Dearing Review Committee in 1997:

- to inspire and enable individuals to develop their capabilities to the highest potential levels throughout life, so that they grow intellectually, are well equipped for work, can contribute effectively to society and achieve personal fulfilment;
- to increase knowledge and understanding for their own sake and to foster their application to the benefit of the economy and society;
- to serve the needs of an adaptable, sustainable knowledge-based economy at local, regional and national levels; and
- to play a major role in shaping a democratic, civilized and inclusive society.

(National Committee of Inquiry into Higher Education, 1997)

The outputs of an educational institution or an educational system, as Dearing makes clear, are very much more than numbers of graduates or quantities of knowledge. The effects of higher education spread far and wide and touch to the heart of human hopes and ambitions. No simple definition of university effectiveness will suffice.

## A Revolution in Higher Education

### *Mass Higher Education*

"Higher education and great numbers. That's a contradiction in terms" said Nietzsche. Time has proved him wrong. Everyone now seems to want a university education; many will want it throughout their lives. The West and Dearing reports have consolidated in our minds the idea of universal higher education. What was once for an elite is now for everyone.

The changes wrought by mass higher education go far beyond larger class sizes. They have changed public perceptions of higher education, and the whole apparatus of professional standards and accountability. The relationship between governments and universities has changed; they are no longer conceptualized as partners, but as

"two parties with different interests and priorities that sometimes converge and sometimes sharply conflict" (Clark, 1996). There is an international movement towards connecting funding with performance. The immense cost of mass higher education means that those who pay the piper—who are still mainly the taxpayers, not the students—will want to call the tune. The prospect for universities is one of even less public money combined with yet more students.

### *Knowledge Growth and Differentiation*

Pressures to enlarge university research and consultancy have been similarly inflated. Fifty years ago industry ran on coal and brawn. Today, it runs on electronics and human expertise. Much of this knowledge, especially at the cutting edge, comes straight from universities. They have become triumphantly successful creators of the information age's most important product. Expectations that research will contribute to economic objectives are in large part a consequence of universities' own achievement in increasing the quantity of knowledge, the degree of differentiation between subjects, and the proportion of knowledge that can be applied to "real" problems. But these increases have not been matched by added funding or personnel; knowledge growth tends constantly to exceed the capacity to service it (Clark, 1997).

### *Changes in University Organization*

Mass higher education and knowledge growth have altered the management patterns of universities. It is impossible to administer huge organizations in the old, unwieldy, "collegial" way (Scott, 1995).

Changes in internal organization can be captured in a simple model distinguishing degrees of control over policy definition and policy implementation (Figure 1). McNay's (1995) four ideal types—every university is in reality a mixture of all four—are:

- The collegium, with loose policy definition and loose control over implementation: the focus is on freedom to pursue university and personal goals unaffected by external control. Discipline-based departments are the main organizational unit. Standards are set by the international scholarly community, and evaluation is by peer review. Decision-making is consensual, the management style is permissive, and students are seen as apprentice academics.
- The bureaucracy, representing "managerialism" in higher education. Its focus is on regulation, consistency and rules; its management style is formal-rational. A cohort of senior administrators wields considerable power. Standards are related to regulatory bodies and external references; evaluation is based on the audit of procedures. Decision-making is rule-based, and students are statistics.
- The corporation, with tight control over both policy and implementation. Here the focus on loyalty to the organization and senior management; the management style is commanding and charismatic. There is a crisis-driven, competitive ethos;

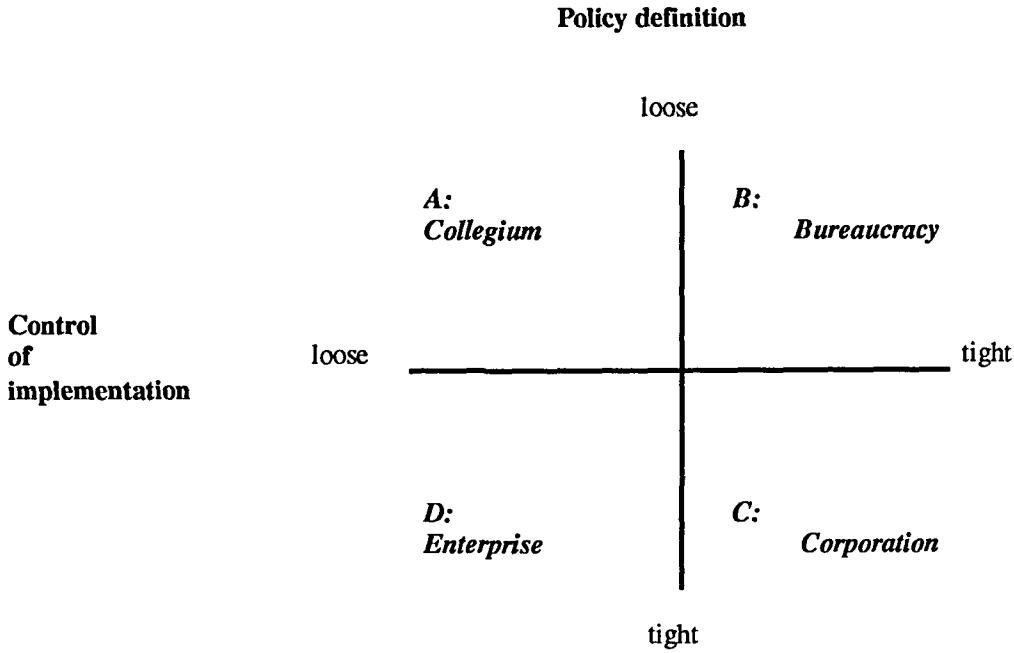



FIG. 1. Four university models (after McNay, 1995).

decision-making is political and tactical. Standards are related to organizational plans and goals; evaluation is based on performance indicators and benchmarking. Students are units of resource and customers.

- The enterprise, whose focus is on competence. It is orientated to the outside world, and it espouses continuous learning in a turbulent environment. Its management style is one of devolved leadership; its decision-making is flexible and emphasizes accountable professional expertise; its dominant unit is the small project team. Its standards are related to market strength; evaluation is based on achievement and repeat business. Students are seen as clients, and as partners in the search for understanding.

The dominant pattern of change for U.K. and Australian higher education would appear to be from collegium and bureaucracy to corporation and enterprise. This is supported by the views of samples of academic leaders at head of department level in Australia, the U.K. and Singapore (Ramsden, 1998). There is a perceived decline in the culture of the collegium, an increase in the corporate and enterprise cultures, and a steady or declining bureaucratic culture.

### *The Changing Nature of Academic Work*

The new and often conflicting demands on universities—increased size and access, knowledge that outruns resources, global competition, graduates who are more

employable, more for less (Clark, 1997)—have had marked effects on their academic staff.

The most telling consequence has been an obligation to perform better in all aspects of academic work, and to do it, of course, with fewer resources. Academics are: "under virtually daily monitoring from very public and often critical audiences" (McInnis, Powles & Anwyl, 1994). There are more students to teach, and they are no longer a gifted and motivated academic group, capable of surviving the bleakest of bad teaching, but much more like school students in their range of ability and the corresponding demands they place on academics' time and energy. In Boyer's study of the international academic profession (Boyer, Altbach & Whitelaw, 1994), less than 20% of Australian academics surveyed agreed that undergraduates were adequately prepared in written skills and mathematical skills. Halsey's survey of U.K. university staff showed that nearly a third of respondents said that the academic ability of students at entry had declined (Halsey, 1992). It could hardly be otherwise in a mass system. We have also seen intense pressure on staff to increase their research activity and output.

So today, as many surveys show, academics feel less in charge of their own destinies. To compound the problem, public respect for them has been eroded. In the Cambridge of the 1930s, to be a don was to be close to the pinnacle of the hierarchy of status, and no one doubted their value: "For many it was a profound comfort to be one of a society completely sure of itself, completely certain of its values, completely without misgivings about whether it was living a good life" (Snow, 1956, p. 312). Today, people seem to think that lecturers are not productive; do not look after their students well enough; may not be maintaining high standards; and should work harder (Lucas, 1995). These changes can be summarized as a shift from academics as professionals to academics as proletarians (Halsey, 1992).

How can tomorrow's university survive and prosper in this harsh environment? How can its staff adapt to these changes? How can the university hope to "[preserve] the connection between knowledge and the zest of life, by uniting the young and old in the imaginative consideration of learning" (Whitehead, 1950)?

## Effective Learning and Teaching

Knowledge growth and performance based funding have of late placed undergraduate teaching in an invidious position. Its status has been eroded since it has come to be seen as a distraction from research, which is not only more highly rewarded but, if we are honest about it, is for many academics a lot more fun. Staff who are strongly committed to teaching often feel out on a limb. In the U.S., well over half the respondents in a survey of research universities thought that the pressure to do research reduced the quality of teaching at their university (Boyer, 1990). In Australia, and in virtually every other Organisation for Economic Co-operation and Development (OECD) country, there is a widespread perception that good university teaching is not recognized and rewarded, while good research is (Ramsden & Martin, 1996).

The effects have been felt in criticism of the standards of university teaching. Academics are caught in a cross-fire of expectations (Clark, 1997). There is less

incentive to teach well; yet the task is harder in mass higher education, and the customers are more demanding.

Students and graduates consistently complain about:

- Poor quality of assessment processes (especially inferior quality and amount of feedback on student learning; and assessment that does not test understanding);
- Ineffective and unenthusiastic presentation; too much "lecturing" and not enough "dialogue" with the students;
- Failure to encourage active, independent learning;
- Unclearly specified aims, objectives and standards;
- Not being treated as partners in the learning process.

In 1996, Anna Tobin, a recent U.K. graduate, felt that variation in teaching quality was one of her biggest concerns. She "endured lecturers with IQs to match Einstein's, who have written a series of theses and libraries of books, but who could not teach a dog to sit ... this appears to be a nationwide problem".

The picture from Australian graduates is hardly any better. Only about one in three of the 70,000 or 80,000 Australian graduates who respond to the Graduate Careers Council of Australia's (GCCA) survey agree that they are satisfied with the quality of teaching they experience. Australian university graduates are generally unhappy about their lecturers' clarity in explaining things and their ability to motivate them to do their best work. Only a small minority feel that they receive useful feedback on their progress. Just over a quarter say their teachers put a lot of time into commenting on their work.

There is widespread evidence that many students are leaving university without mastery of key ideas in their field. They have appropriated what one mathematician, 55 years ago, called "imitation subjects" (Sawyer, 1943; Ramsden, 1992): inadequately memorized facts, misunderstood algorithms, weak knowledge of principles, inability to apply theory, meagre employment-related, generic skills.

Much of the blame lies at the door of bad teaching and inappropriate assessment. Inspiring students, explaining one's subject well, clearly specifying standards, and giving useful feedback through assessment are closely related to whether students learn effectively. As we can see in Table 1, "deep approaches" (aimed at understanding), academic achievement, self-reported skills development, and overall satisfaction are associated with good teaching, clear goals, and appropriate assessment. "Surface approaches", aimed at satisfying assessment requirements minimally, are related to poor teaching, unclear goals, and inappropriate assessment. Figure 2 shows the relationships between good teaching and approaches to learning for 50 subject units in an Australian study of academic departments and the quality of learning (Ramsden, Prosser, Trigwell & Martin, 1997). Figure 3 illustrates the effect of good teaching on graduates' reports of their development of employment skills, using Course Experience Questionnaire data (Ainley & Long, 1995). These different sources provide evidence of the effects of university teaching on student learning.

The first duty of a university teacher is to create a sense of excitement about the subject matter. When people are inspired to learn, they do marvellous things and

TABLE 1. Correlation coefficients between students' perceptions of the learning context, approaches to learning, and learning outcomes (CEQ data, Griffith University)

| | Deep approach | Surface approach | Academic achievement (GPA) | Generic skills development | Overall course satisfaction |
|---|---|---|---|---|---|
| Experience of good teaching, including feedback on assessed work | 24 | −34 | 47 | 46 | 64 |
| Experience of clear goals and standards | 12 | −29 | 46 | 33 | 55 |
| Experience of inappropriate assessment | −21 | 47 | −36 | −35 | −47 |

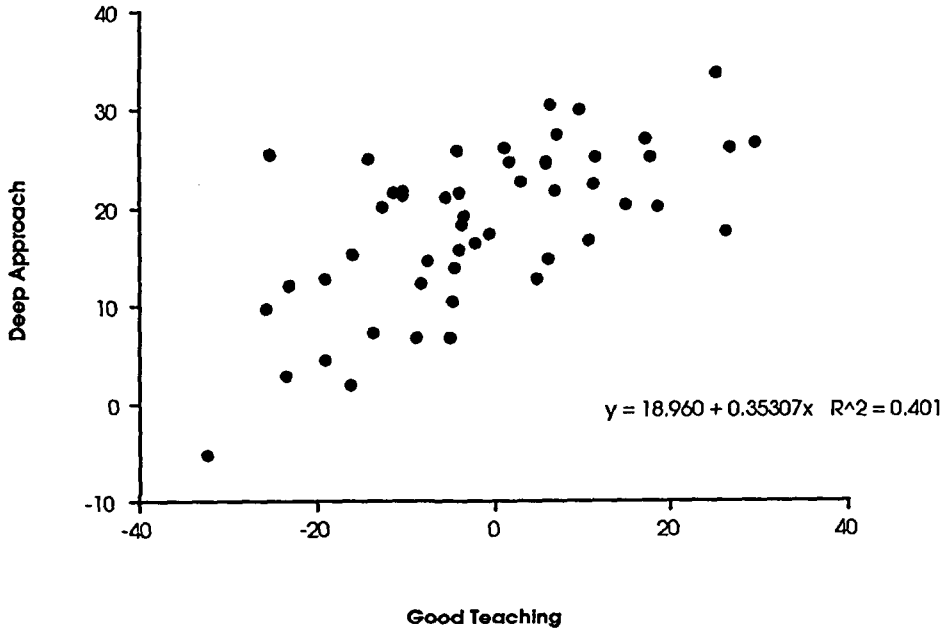
Decimals omitted.
*Source:* Wilson, Lizzio and Ramsden (1997).

persist at difficult tasks. Anyone knows this who has ever pursued a hobby or sport. Effective university teaching is about making learning possible. There can be no excellence without changes in understanding. Changing understanding cannot be achieved by imparting information alone, whether we use the most modern technology or simple chalk-and-talk. It can only be done by shaping experiences for students that encourage them to learn. What the student does matters more than what the teacher does in this endeavour. Good teaching means seeing learning through the learner's eyes. Students who experience good teaching, combining the strong regulation of clear goals with the opportunity to work independently perform better, remember more, and are more likely to develop generic skills.

### *From Teaching to Learning*

A notable change has taken place in how we think about university teaching during the past 25 years. Research into student learning in higher education has remade our understanding of how to attain high quality learning outcomes. There been a shift of focus from improving teaching methods to improving the ways we can help students to learn. What students do, not what teachers do, determines the quality of learning. "Teaching" at university involves arranging things so that students are aligned with the content to be learned. It was basic research from this perspective, incidentally, that led to the development of the GCCA's Course Experience Questionnaire, whose content was chosen to reflect the perceptions that we know are associated with higher quality learning outcomes (Wilson, Lizzio & Ramsden, 1997)

The ideas have also inspired the many award courses in university teaching in Australia and the U.K. They inform the everyday practice of academic staff development, much of the work of the Committee for University Teaching and Staff



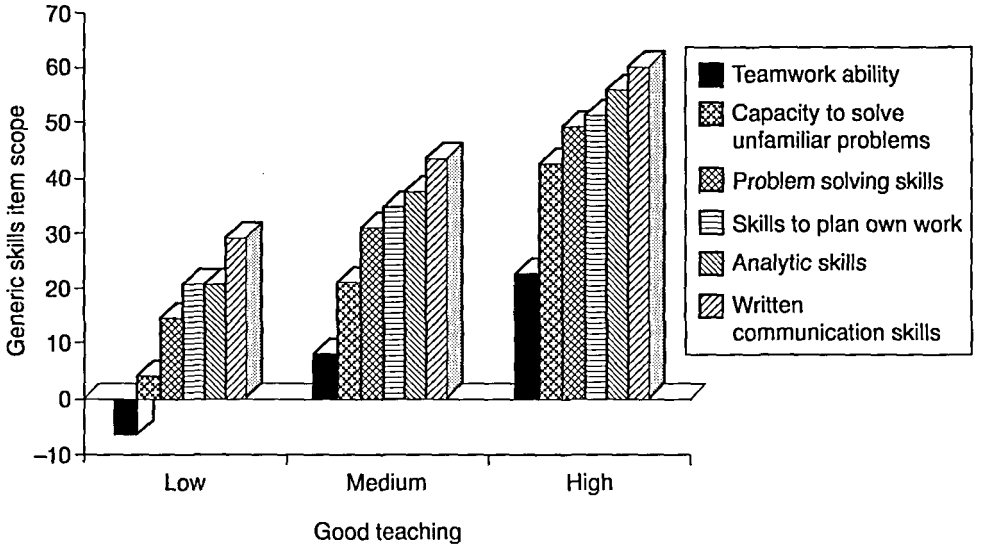

*Source:* Ramsden, Prosser, Trigwell and Martin (1997)

FIG. 2. Association between deep approach and perceptions of good teaching (50 departments, first year courses).

Development, the application of flexible learning methodologies to higher education (Laurillard, 1993), and new methods of evaluating teaching and learning.

One significant contribution to fundamental knowledge of how to improve university teaching was made in Australia by Keith Trigwell and Michael Prosser (of the University of Technology, Sydney and La Trobe University, respectively) in a series of ARC-funded projects. Prosser and Trigwell have studied academics' ways of conceptualizing their task as teachers of first-year science students. It is found that they approach teaching in different ways: some focus on transmitting the content of the syllabus, and on their own performance; some focus on trying to help students change their understanding through establishing a dialogue with them, and on ways of creating an environment in which students can learn. It is established that the transmission-focus is perceived by students to encourage a minimal engagement with the content, and to lead to poorer quality learning. The student-focus carries the potential for students to engage actively and more effectively with the content, and to learn it better. The way university teachers think about teaching, as helping students to learn content, or as taking for granted that students will learn content presented to them, is the limiting or the liberating factor in teaching and the quality of student learning (Trigwell, Prosser & Lyons, 1997).

Developments of Prosser and Trigwell's work have confirmed that the different approaches to *teaching* are associated with *students'* perceptions of the subject




*Source:* Data from Ainley and Long (1995).

FIG. 3. Effect of good teaching on the development of six generic skills.

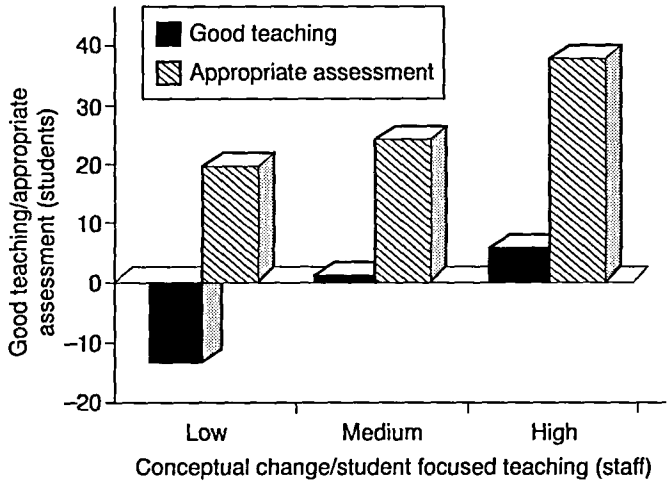
in a range of fields of study, using modified CEQ scales (Ramsden *et al.*, 1997). The picture of what encourages students to learn effectively at university is now almost complete.

Figure 4 shows data from subjects forming part of 48 different courses across four fields of study. The average scores for good teaching (students' perceptions) are plotted against the average scores for academics' reports of the extent to which they focused on making student learning possible in the first-year undergraduate subjects they taught. The subjects are divided into low, middle and high on this measure. The bigger the focus on student learning, the better the perceived teaching. As we have already seen, these perceptions are linked to more effective learning.

An effective university will encourage its academics to consider their teaching as a means by which they can make student learning possible. This will require appropriate rewards and recognition. In turn, this demands accurate assessment of their performance as professionals who can "shape the experiences" of their students and take their part by seeing that experience through the learner's eyes. It requires valid measures of the extent to which they have influenced their colleagues to follow the same path. Here, performance management of academic staff has a vital role to play. It is also worth noting that these ideas about teaching place it closer to, rather than further from research. They embody the ideas of scholarship in teaching and of teaching as an inventive professional activity.

## Effective Scholarship and Research

This leads me naturally to that other main measure of university effectiveness: the amount and quality of its contribution to scholarship, research, and the more




*Source:* Ramsden, Prosser, Trigwell and Martin (1997).

FIG. 4. Association between staff reports of approach to teaching and student perceptions of course environment.

practical aspects of these things variously described as "service", "consultancy" and "academics as public intellectuals". We need simultaneously to find better ways to link research and teaching and to escape the rather recent myth that they are inseparable.

*The Four Scholarships*

Several years ago, the late Ernest Boyer (Boyer, 1990) pressed for a rethinking of academic work to allow greater recognition of its diversity, arguing for institutions and individual staff to adopt varying mixes of "four scholarships":

- the scholarship of discovery (original research and the advancement of knowledge);
- the scholarship of integration (connecting ideas and synthesis across discipline boundaries);
- the scholarship of application (assembling knowledge through an interaction between intellectual and "real world" problems of practice); and
- the scholarship of teaching (transforming knowledge through bridging the gap between the scholar's understanding and the student's learning).

Perhaps the most important thing to note about Boyer's scheme is that it cuts through the unfortunate academic tendency to place application and action on a lower plane than discovery. Nothing could be more menacing to tangible progress. Boyer's model of the four scholarships represents a near-Copernican revolution in thinking about academic work. Although Boyer did not quite spell it out as such (nor did the West Report's re-visiting of Boyer) his re-conceptualization can be

understood as a change from dichotomous models of university work (teaching versus research, practice versus theory) to continuous ones. The model integrates the different things academics do. The four scholarships are not distinct entities, but overlapping qualities of academic work.

Both teaching and research are about transformation. In all four forms of scholarship, certain activities and products constitute academic outputs. Some of these are difficult or impossible to quantify. Who would presume to capture in numbers, for example, the intellectual climate that surrounds a disciplined and creative research laboratory and the inspiration that its graduate students derive from working there? "Not just the outcomes, but the process, and especially the passion, give meaning to the effort. The advancement of knowledge can generate an almost palpable excitement in the life of an educational institution" (Boyer, 1990, p. 17). It is equally hard to tie down many of the products of scholarly service to the community and commerce, the consequences of a brilliant integration of existing facts, and the uncelebrated effects of exalted teaching on future careers. Nevertheless, there is again a broad consensus that scholarship in each area incorporates activities such as consultancies, grant applications, reflection, editing, writing, supervision, peer reviewing, and conferences. It covers products such as performances, patents, creative works, articles and papers, books, lectures, and trained research students.

It is impracticable to assay the worth of all these things, but it is possible to gain some general idea of scholarly output by examining the quantity of material and numbers of activities performed. The quantity of research produced by a department or an individual staff member is highly correlated with peer estimates of the department's or individual's research quality.

There is a large world literature on research productivity (including integration and application as well as discovery) and its correlates. From it can be deduced four conclusions. First, there has been an exponential growth in research output during the last 30 years. Secondly, despite this fact, average output does not seem to be very high. Thirdly, this output is extremely variable or skewed across institutions and individual academics. Fourthly, there are multiple effects on levels of productivity. These give us clues about how to make a university more effective.

Boyer's survey of U.S. faculty in 1989 found that a third of staff did not attend any professional meetings in the previous twelve months; that 82% received no federal funding for research in the same period; that 56% had never published a book; and that 29% had never published an article. Even in research and doctorate granting universities, only about half had published eleven or more articles in their careers. In the U.K., Halsey found that less than half his sample had produced more than ten papers in their entire careers.

My own investigation of Australian research productivity, carried out with Ingrid Moses, indicated a median output of about five refereed articles in the previous five years across the system (Ramsden, 1994). Three quarters of respondents in the older universities published no books, 60% no book chapters, and 20% no articles during this period. My figures are unaudited self-report data, and probably overestimate the amounts.

These findings do not suggest very high levels of average output. Academics are

generally not very prolific publishers. The reality of research productivity is that a small proportion of staff produce most of the work. Table 2 illustrates this phenomenon for the staff in the older universities in Australia. Using a composite measure of productivity (including books, papers, chapters and conference papers), it shows that half the sample produce 87% of the total output, and that 14% of the sample produce half of it. Equivalent distributions for the newer universities are even more skewed, with 10% of staff producing half the output. These results resemble closely those of U.S. studies (see Fox, 1983).

These facts imply room for progress, both in terms of absolute productivity and its distribution. Studies of the correlates of research productivity provide important clues. An early interest in research, involvement in research activity, satisfaction with reward systems, and seniority of academic rank are important influences.

For example, highly active researchers produce on average more than five times as many publications as the least active group; dissatisfied staff are around half as productive as satisfied ones. Staff reporting high levels of intrinsic academic motivation (that is, those who tend to agree with statements such as "I find most new topics in my subject area interesting, and often spend extra time trying to obtain more information about them" and "I become increasingly absorbed in my academic work the more I do") are twice as productive as the least intrinsically motivated. By far the best structural predictor of individual output is the academic's membership of a highly active research department. He or she is, statistically speaking, four times more productive than his or her colleagues in one of the less vigorous units. Active research departments, with a strong culture of research quality and support for staff to develop research careers, produce more publications for their size than less active ones. Size itself is a poor predictor of research outcomes.

We can illustrate the important relation between research activity and productivity at both individual and aggregate level, using my own studies of Australian academics. Notice the potent effect of higher levels of activity on quantity of publications (Table 3).

Figure 5 illustrates a model of how individual staff research output is associated with both personal and structural factors. Staff perceptions of a co-operative departmental climate combined with location in a research-focused university predict higher levels of total departmental activity (the boxes on the left); this increases the

TABLE 2. Percentage of publications produced by percentage of academic staff in pre-1987 Australian universities

| | Percentage of academic staff | | | |
|---|---|---|---|---|
| | 10 | 14 | 40 | 50 |
| Percentage of total output (all publications) | 36 | 50 | 80 | 87 |

*Source:* Ramsden (1998).

TABLE 3. Weighted publications index for last 5 years by amount of research activity

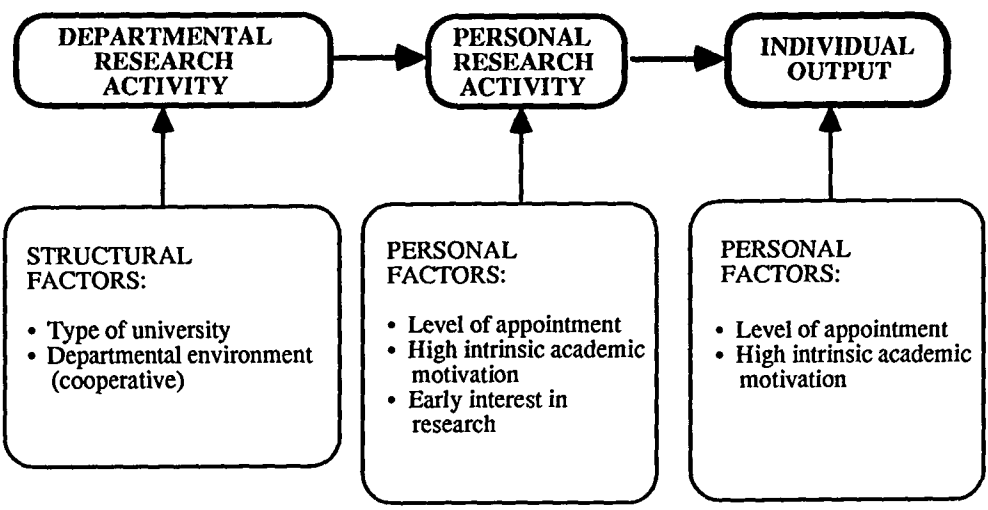
| Number of research activities reported[a] | Publications index[b] |
|---|---|
| less than 4 | 1.8 |
| 4–7 | 5.1 |
| 8 or more | 10.9 |

[a] Including "Received an external competitive research grant", "Refereed one or more articles for a journal", "Supervised one or more Ph.D. students".
[b] One unit = one refereed journal article.
*Source:* Additional results from 1989 survey of Australian academic staff (Ramsden, 1994).

likelihood that an individual member of staff will be an active researcher. Individual variables such as level of appointment, an interest in studying one's subject for its own sake, and an early interest in research, combine with these structural characteristics to predict higher individual rates of scholarly publication. The Australian results support a model based on Fox's theory (Fox, 1992) that individual and environmental factors work together to influence research productivity.

### *Creativity and Research Performance*

A characteristic quality of highly productive researchers is their capacity to address problems that are neither too trivial nor too difficult. Discovery, application and integration comes from establishing the right balance between what is interesting




*Source:* Ramsden (1998)

FIG. 5. Structural and personal factors related to individual research productivity.

and what is solvable. The issue is directly analogous to the creative tension between freedom and discipline which the effective university teacher must constitute for his or her students.

I am sorry to say that many of today's would-be researchers in my own and related fields have little grasp of this concept of balance, which Peter Medawar formalized in his view of science as "the art of the soluble", though it applies generally.

Figure 6, derived from Loehle (1996), identifies the zone of the soluble by relating level of difficulty to payoff. Problems in the soluble zone are beyond current understanding but not so perplexing that they are not solvable in the time available. The zone of the soluble problem is not, of course, precisely quantifiable, but it is nevertheless real. To encourage more academics to focus on this zone requires a stress on creativity and intrinsic interest in the issues—what used to be called "loving your subject".

It is incongruous that the messages sent to unsuccessful researchers often implant an attitude that leads to further failure. In a high pressure, performance-driven environment, there are temptations to focus on the bottom end of the parabolic function linking difficulty and payoff shown in Figure 6—the easy problems that potentially produce lots of insignificant output. It is, of course, important to ensure that research proposals are accurate, sufficiently focused, and that the research project itself is well-managed. But it is equally important to ensure that they are driven by intrinsic interest and creative energy. Even more important is that they address the zone between the too-easy and the too-difficult. Possibly even more important than that, given the comparative rarity of really creative work, is that the environment for academic work allows people space to perform.

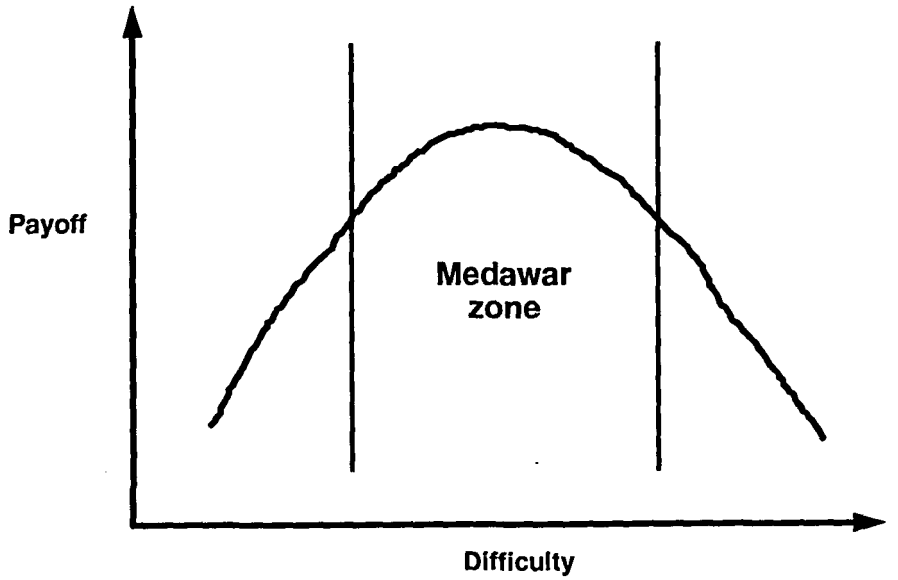
There is little point in bothering about doing research unless you enjoy it with a passion. If this means that we formalize the existing fact that most people do not do much research of the discovery type, we would only be accepting the truth. There are many other things university staff can get enthusiastic about. One day we may see Boyer's scholarships of integration, teaching and application equally rewarded alongside discovery. In my view, trying to increase research productivity by getting every academic to be more productive in the narrower sense will probably never work. At best it will produce what anyone associated with the journal editing process sees these days—the churning out of easy solutions to superficial problems, in the hope that someone, somewhere, will publish them.

I have said nothing here about the need to devise better measures of the range of scholarly outputs from concert performances to engineering consultancies to the scholarship of teaching, but the same general principles apply. An effective university must always be about excellence, not mediocrity. We need to find improved ways of sending this message to staff in the means we use to assess their productivity.

## Changing the Environment: Influences on Effectiveness

The studies of research productivity and teaching which I have referred to above have some common threads.

First, they emphasize how the environment for academic work, as perceived by




*Source:* Loehle (1996)

FIG. 6. Relationship between degree of difficulty and payoff from solving a problem.

the students and the academics themselves, is associated with the quality of learning, teaching, and research.

Secondly, they illustrate the multiple aspects of "effectiveness", and especially the need to combine apparent opposites in order to approach it, in academic endeavours as diverse as undergraduate learning and obtaining ARC grants: control, clarity, discipline, firm management, precision, on the one hand, and freedom, choice, inspiration, vision and creativity, on the other.

The perceived environment of Australian and U.K. universities is an area in which relatively small inputs aimed at changing that environment are likely to produce disproportionately large results. This is because we start from a dismal position, variously described as "poor staff morale" and declining commitment. I will confine my discussion here to academic staff.

It seems significant that Lacy and Sheehan (1997) found that less than one in five Australian academics were satisfied with the way their institution was managed. It is interesting, however, that academics continue to report high levels of work satisfaction. Most of them are satisfied with the courses they teach, their relationships with their colleagues, job security, opportunities to pursue their own ideas, and the job as a whole. It is also important to remember, as McInnis (1996) reports, that 80% of staff say that intrinsic interest in the subject is their main motivator.

In summary, academics today remain relatively contented with their work while being increasingly dispirited, demoralized, and alienated from their organizations (Halsey, 1992; McInnis, 1992). Yet commitment, engagement, positive attitudes, passion, and vigour are qualities that inform productive academic environments—for both students and academic staff.

There is little doubt from studies of other businesses that employees' attitudes to the organization are associated with company performance. The better the attitude, the better the profitability and the productivity. The better the staff development and people management, the better the capacity of the organization to adapt to new demands, new technologies, and to maintain its position in the market (Gollan, 1998). Many of us would like to believe that universities are intrinsically different from other organizations, but it is unlikely that they are so different in these respects, especially now that they are more like businesses than they ever used to be—more subject to the vagaries of markets, more in need of constantly innovating in order to compete convincingly (Drucker, 1955).

How can we improve the environment? Certainly not by protesting about the intrusion of managerialism and lamenting the loss of a golden age where academics were free spirits. The golden age, like most golden ages, was mythical. Pumping resources into salaries and conditions, even in the unlikely event that the money was available, would be unlikely to do the trick either. But neither will blaming the academic staff for being resistant to change and unwilling to accept reality.

We could instead begin by asking a few questions. If we want to improve teaching, it is a good idea to ask our students what helps them to learn. If we want to improve the academic work environment, it might be a good idea to ask people in universities why they feel alienated from their organizations. When this is done, we find that the problem, as Lacy and Sheehan's (1997) results imply, appears to lie in how academic work is organized and managed. The most common reasons given appear in Table 4.

It is revealing that the comments staff make about why they feel alienated are congruent with what we know about effective environments for university learning and research. In particular, they illustrate the similarity between a good environment for academic work and a good environment for student learning: students learn better, as we have seen, when they receive timely feedback, experience clear goals and appropriate assessment, and are challenged by teaching that goes beyond "telling" to stimulate genuine engagement with the subject matter. The comments of academics also reflect the Institute of Personnel and Development's analysis of characteristics associated with more and less successful businesses (see Gollan, 1998). In short, it seems that we are poor at people management in universities.

The key to improving performance is to be found in management processes that recognize the imperatives of mass higher education while maximizing academic autonomy and rewarding intrinsic interest. Collegiality as a way of managing tomorrow's university is obsolete. "Managerialism" is an inevitable reality. But declaring that academics need more managerial stick to deliver the goods is a recipe for disaster. We need new ways of inspiring academics to work both independently and collaboratively; and new ways to help them through change. The solution may lie in more effective leadership.

The study of leadership has exerted a fascination down the ages. Perhaps the best known book about it is *The Prince*, published in the early sixteenth century. Anthony Jay has pointed out how significant it is that Machiavelli did not call his book something like *The Art of Government*. The idea behind *The Prince* is embodied in its

TABLE 4. What academics say about why they are alienated from their organizations

1. There is an apparent lack of vision and direction: we don't know where the university is going, or why.
2. The university's administrative processes work inefficiently, reducing the time we have available for core tasks such as research and teaching.
3. The focus is too much on managing resources and budgets well, and not enough on managing people well; the management don't seem to care.
4. There's too much telling us to change; there's not enough reasons given why we should change.
5. There is too little emphasis on training and development to help people adapt to change.

title. Leadership matters. The qualities of the leader are the keys to a state's success. Machiavelli was a pragmatic person. Instead of trying to establish what was right and wrong about power and leadership, as so many others have done before and since, he looked at what worked. What will work in today's university?

The essential issue is: how do we marry new imperatives with fundamental academic values? In this respect, good leadership is conceivably the most practical and cost-effective strategy known to organizations that are struggling to survive and to make progress through troubled waters. It can transform the commonplace and average into the remarkable and excellent; it has the effect of making everyone feel personally responsible for the standard of work produced by themselves and their colleagues; it inspires people to grasp the opportunities offered by change. The most substantial advantage a university in a competitive and resource-hungry higher education system can possess is capable academic leadership. It creates an environment for better academic work.

Environmental effects on academic productivity are borne out by research into what affects academic work. The least productive staff, both in research and teaching, are those who feel most alienated and excluded by the system; they also rate their own performance low. These relatively less effective academics are more likely to be members of academic departments in which their colleagues rate the department's level of co-operation, discussion and participation low (Moses & Ramsden, 1992).

### *The Role of the Head*

The "middle manager", such as a head of school, plays a pivotal role in establishing a productive environment. In our studies of leadership at the Griffith Institute for Higher Education, we have found that:

- Academic leaders need to stay close to the academic or scientific action to bring out the highest performance in their colleagues;
- Leadership motivates people intrinsically by improving expectations, and thus builds on the primary existing motivator of academics;
- Strong leadership stimulates and encourages imaginative thinking, so long as it is backed up by credibility;
- Effective academic leaders at middle manager level filter out bureaucratic demands, leaving academics free to get on with their primary job. They "keep

bureaucracy at bay" (Sedlacek, Sapienza & Eid, 1996). They understand how to act as a barrier between inflexible university administrative systems and academic staff; they can attenuate the potentially negative effects on academic commitment of new approaches to university management;

- They also have the humility to recognize and support colleagues whose performance as researchers and teachers outshines theirs. They are able to lead from behind as well as from the front. Like good teachers and good researchers, they hold in tension freedom and control, confidence and reserve;
- Effective academic leaders are strong enough to accept that the best of their colleagues may well surpass them, and modest enough to facilitate the work of others rather than focusing solely on their own;
- They balance the natural tendency of their colleagues to pursue open-ended problems with the need to provide clear goals, economic constraints, timeframes and precise outcome criteria.

In our work on management and leadership in Australian, New Zealand, U.K., and Asian universities, we have found that the characteristics noted in Table 5 are associated with staff reports of greater satisfaction with their academic leader's performance.

Several additional research studies indicate how leadership is related to higher productivity in research and teaching.

TABLE 5. Features of effective academic leadership

| Characteristic | Examples |
|---|---|
| Leadership in teaching | Bringing new ideas about teaching into the department |
| | Conveying a sense of excitement about teaching to colleagues |
| Leadership in research | Inspiring respect for own ability as a researcher; leading by example |
| | Providing guidance in scholarly practices |
| Strategy, vision and networking | Advocating the interests of the department to the rest of the University |
| | Clear goals and articulated vision for the department |
| Collaborative and motivational leadership | Honesty, openness and integrity |
| | Positive attitude to change and innovation; inspiring people to give their best |
| Fair and efficient management | Delegating well |
| | Getting things done with minimum fuss; highly organized |
| Development and recognition of performance | Encouraging initiative and providing support for learning new things |
| | Praising and sustaining people's successes; giving good feedback to help them improve |
| Interpersonal skills | Not being self-interested or self-important |
| | Communicating well and having concern for others |

*Source*: Adapted from Ramsden (1998).

In university teaching, approaches which focus on "making student learning possible" (and, as we have seen, lead to better learning at university) are more common in environments perceived to be ones where the teacher has some control over how and what is taught, the class size is not too large, and the department supports teaching. In turn, these perceptions are associated with leadership by the head or course convenor which is firm and fair; which itself models good teaching and inspires people to adapt positively to change; which supports staff development (often through resourceful delegation) and helps people learn new teaching skills; and which encourages colleagues to learn from each other (Ramsden, 1998; Ramsden *et al.*, 1997).

The effects of environment and leadership are equally potent on university research outcomes. Staff experiences of the context of in which they work have been consistently identified as exerting an influence on research performance. Other things being equal, output and activity are greater when the environment affords:

- A distinctive research culture;
- Clear goals;
- A positive group climate;
- Assertive participative governance;
- Decentralized organization;
- Frequent communication;
- Accessible resources (particularly human resources);
- Appropriate rewards;
- Leadership with research expertise and skill in both initiating appropriate organizational structure and using participatory management practices. (Bland & Ruffin, 1992, p. 385.)

Investigations of Australian academics confirm an effect on research productivity and activity of staff perceptions of the degree to which their department provides a co-operatively-managed environment (Figure 7). In these departments, staff are more likely to show high levels of intrinsic motivation and commitment to academic work, and are less likely to be pessimistic about the reward system. Their research activity and output is higher than would be predicted from knowledge of other factors such as their early interest in research and their seniority (Ramsden, 1994). Some environments, and some academic leaders, seem to "add value" to existing research performance (Ramsden, 1998).

Summarizing much of the recent research on academic leadership, we can say that academic work gets done better when the leadership is enabling, coherent, honest, firm, and competent; when the leadership combines efficient management of people and resources; and when it blends a positive vision for future change with a focus on developing staff—a focus on helping them to learn. The effects occur through the academic staff members' perceptions of the context in which they work, a phenomenon illustrated in Figure 8.

As in other types of organizations, both management and leadership are needed in universities to ensure that both today's and tomorrow's needs are catered for. It is not correct to assert that effective leaders in universities, as perceived by their staff,

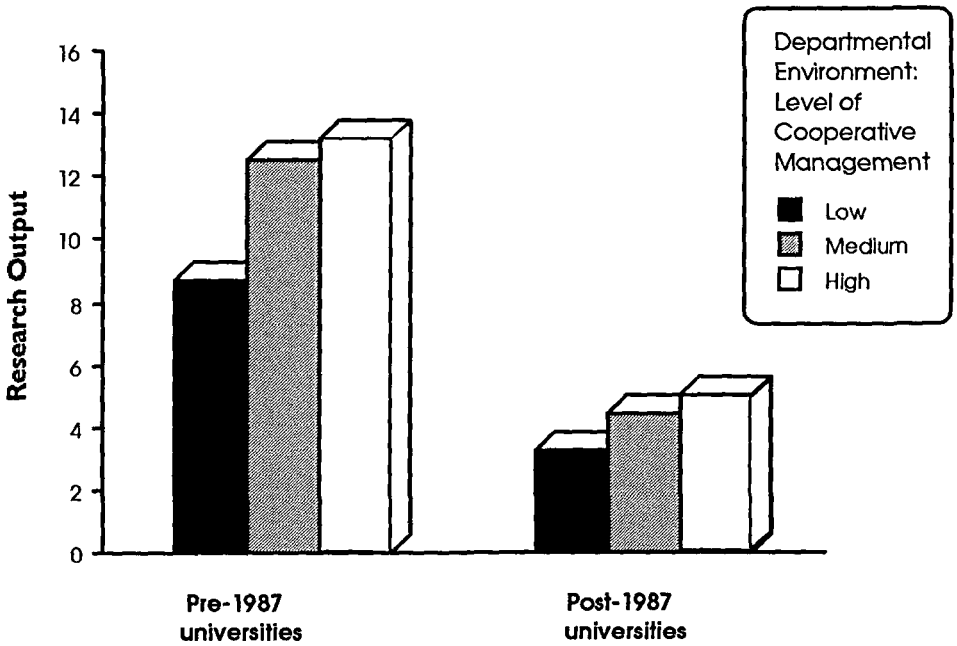



FIG. 7. Effect of perceptions of co-operative management on research productivity.

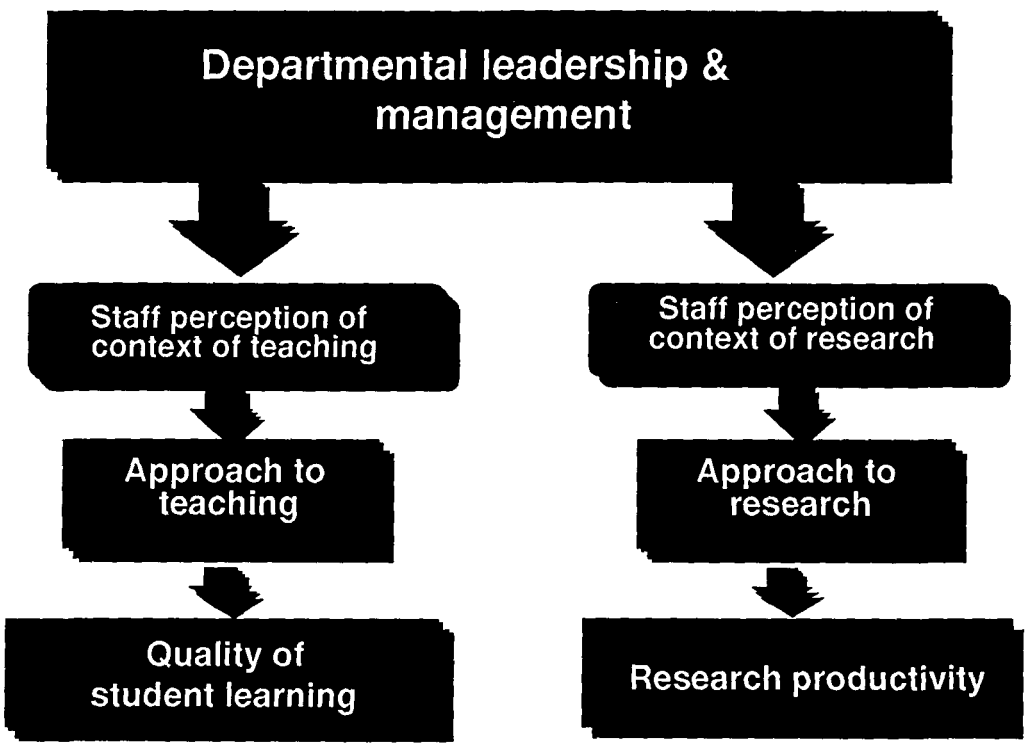



FIG. 8. Learning and research are influenced by perceptions of the academic environment.

are functionaries whose main role is to react to academic demands, and who would rather be doing something else. Nor are they simply inspirational academics who cannot manage the budget efficiently or impose the restraints on academic privilege that are necessary for academic productivity and good teaching. On the contrary, they are all-rounders who combine aspects of management and leadership in relation to both *people* and *tasks*. At the heart of the combination is the leader's own capacity to learn. These ideas have important implications for the training of future generations of academic managers at every level.

A remarkable thing about all the work I have discussed is the resemblance between competent academic leadership and good university teaching. We can see these similarities illustrated in Table 6. Deep at the heart of effective teaching is an understanding of how students learn and an ability to enter into their world; deep at the heart of effective academic leadership is an understanding of how academics work and an ability to enter into *their* world.

### *From Collegium to Enterprise*

The symmetry between the "enterprise" university I referred to earlier and leadership that enables people to manage change and transform their way of working will be apparent. In the university of the future, the needs and hopes of university staff will be better accommodated by management processes that are at once more like helping students to learn and more like best practice in other organizations. This will mean:

- Strong policy control and definition;
- Looser control of implementation;
- Leadership being understood as enabling and support for task achievement;
- Authority being derived from successful performance;
- Much more extensive feedback on performance and generally stronger communication up and down the line;
- Management being understood as a professional skill, learned continuously.

Tomorrow's effective university will need to be organized differently in order to endure and grow. It is beyond the scope of the present article to explore the plural imagination that should define a mass higher education system. Suffice it to say that a single model of academic excellence, dominated by what Don Anderson once called "Big R" research (the expensive style of discovery characterizing the empirical natural sciences), will no longer do for everyone. To strive for success in this model will guarantee second-rate status for most universities (Marginson, 1997). Prosperity for them will depend on changing their way of doing business: on structures of authority that fuse managerial and academic values; on identifying more focused, particular features which they can exploit to their marketing advantage; on new sources of funding; on an integrated administrative core to connect component units to the university's objectives; and on a more outward-looking vision from the academic heartlands of the school or department (Clark, 1996, 1997).

TABLE 6. Effective academic leadership resembles good university teaching

| Good teaching | Effective leadership |
|---|---|
| Clear goals | Direction & vision |
| Challenge & explanation | Inspiration |
| Feedback & support | Developing & recognizing |
| Appropriate assessment | Fair management |
| Independence | Professional autonomy |
| Improvement through evaluation | Improvement through evaluation |

The model of four scholarships invented by Boyer provides one means of actualizing academic performance in the enterprise university. It enables us to integrate the different aspects of academic work; at the same time, it allows us to recognize that excellence through focused attention to one or more of these aspects is an honourable aspiration for individual staff and institutions in tomorrow's competitive environment.

## Conclusion

What, then, is needed to make a university effective in these turbulent times?

> First, its expertise in helping its staff to embrace change enthusiastically—its capacity, supported by its managers, to enable them to see every change as an opportunity.
> Next, its vision and its genius for inspiring students and staff to achieve things they never thought they were capable of doing. To do this it must trust its people and show concern for its students.
> Third, its gift for enabling academics to realize the highest standards of excellence and creativity by shrewdly combining freedom with discipline
> Fourth, its commitment to helping these people to develop their skills, and its resolution to reward and recognize them for their performance and their commitment to continually learning, rather than for the positions they hold or the time they have served.
> Fifth, its capacity to manage both resources and people firmly, fairly, and equitably.
> Sixth, its ability to deliver high quality products and services on time and on budget to an increasingly demanding set of customers.
> Seventh, its talent for marrying imagination with information, independence with discipline, theory with application.
> Eighth, its willingness to live with paradox and to nurture tolerance.
> Last, and by no means least, its courage to admit its inevitable mistakes.

A university can expect its members to exercise the qualities of academic excellence only when it excites them with that same spirit. Higher education is about transforming what is here and now into what will be. Tomorrow's university will survive if it can establish an independent and distinctive means of accomplishing this

purpose. But only the university that can inspire its members with the qualities I have described above, which also describe the characteristics of good leadership, can aspire to be called effective.

The art of leadership is to help people live with uncertainty. "It is the business of the future to be dangerous" said Whitehead; the greatest challenge for our universities is to ensure that their people can step confidently into that future.

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