

PROMOTING A RESEARCH CULTURE AND SCHOLARSHIP AT A HIGHER EDUCATION INSTITUTION

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Abstract

This article offers a glance at strategies related to the creation of a research culture at higher education institutions that desire to reposition academic staff to commit to scholarly work and research outputs. The departure is that these institutions need to focus on a multidimensional and holistic approach to create a research culture in which a sustainable research environment can be established for academia to contribute significantly to research.

The dimensions of a research culture and ethos, focussing on the co-ordination of goals, regular communication and professional rewards, is proposed as a tool with the potential to contribute towards the promotion of a research culture. In this article strategies employed by the previous Technikon Witwatersrand (now merged into the newly formed University of Johannesburg) will be discussed, especially with reference to promoting a research culture and ethos and scholarship. It is suggested that a research culture, although multifaceted, needs to be created to promote scholarship in higher education institutions.

1. INTRODUCTION

Maintaining a research culture in higher education (the essential foundation stone for scholarship to be stimulated and sustained) is rarely a contested issue at universities, since it is customarily accepted as part and parcel of the institutional mission. Although the debate about the relative importance of teaching and research continues, it is probably still accurate to state that academic reputations are still built on a research track record, rather than exceptional teaching skills. Certainly, the most prestigious higher education institutions are the research universities. Duderstadt (1997, p. 4) confirms though the changing nature of this debate and the shift in attitudes regarding research and teaching:

“In recent years, there has been a decided shift in public attitudes toward the purpose of a university, away from research and toward undergraduate education. A several decade-long public consensus that universities were expected to create as well as transmit knowledge, a consensus that supported strong investment in scientific, technological, and scholarly preeminence of this nation, has begun to erode”.

Traditionally, the primary mission of the university has been expressed “... in terms of the honored trinity of teaching, research, and service” (Duderstadt 1997, p. 5). The reality is though that there are higher education institutions, that very often for historical reasons, have tended to give prominence to their teaching function, and although not excluding research from their mission,

have placed lesser emphasis on it. As Pratt, Margaritis and Coy (1999, p. 43) point out: "Many of the newly designated universities have their origins in applied and vocational disciplines where there is a stronger focus on teaching than on research". The promotion and development of a research culture become particularly pertinent if the mission of a group of institutions is altered, for example that of the polytechnics in the United Kingdom and more recently that of the technikons in South Africa when they became degree-granting institutions in 1993.

The polytechnics and technikons or the TAFE colleges (Technical and Further Education colleges in Australia) have had to tackle head-on the challenge of promoting a research culture and ethos and scholarship among academic staff. The need to do so becomes more acute if these institutions engage not only in undergraduate teaching, but also in postgraduate teaching up to doctoral level. In South Africa, the Council on Higher Education had mooted a differentiation in institutional missions (cf. CHE, 2000, pp. 37-46), however the National Plan for Higher Education (Ministry of Education, 2001) declined the five-tiered classification of higher education institutions. The Department of Education is in favour of each institution within its particular mission capitalising on niche areas and centres of excellence as far as teaching and research are concerned. This has implied that career-oriented teaching institutions such as the previous technikons will by no means be excluded from research or the accessing of research funding and that there has indeed been scope to pursue a vigorous research enterprise.

This article looks at the strategies related to the creation of a research culture and efforts to get academic staff to commit to sustained scholarly work and publications.

2. A RESEARCH CULTURE AND ETHOS DEFINED

Quite often the concepts of research culture and research ethos are used interchangeably. The concept of culture is also related to the concept of climate as in the term organisational climate (cf. Pfeffer, 1997, p. 121). "The concept of culture came to education from the corporate workplace with the notion that it would provide direction for a more efficient and stable learning environment" (Stolp, 2000). Geertz (cited in Stolp, 2000) defines the word culture as "historically transmitted patterns of meaning" that emerge in different symbols and implicitly held beliefs. Daft & Marcic (2001, p. 59) refer to culture as a "...pattern of shared values and assumptions about how things are done in the organisation" (cf. too Jones, George & Hill, 2000, p. 332 and Stoner, Freeman & Gilbert, 1995, pp. 181-182). The authors indicate that culture can be analysed at three different levels (based on the Schein model of 1992). The first refers to the surface level of visible artefacts, the second to the tier of expressed values and beliefs, and a deeply embedded level of underlying assumptions and beliefs that constitutes the essence of culture and that guides behaviour and decisions, the third level (Daft & Marcic, 2001, p. 59).

Given the layered nature of institutional culture and that it strengthens over time, it becomes clear why it is such a potentially powerful force and why it can also be extremely resistant to change. The notion of organisational culture signifies a clear understanding that (academic) organisations cannot be understood simply in terms of strategy (planning) and structure (organisation) (Stoner, Freeman & Gilbert, 1995, p. 182). The notion that culture "... is how an organization has learned to deal with its environment" (Stoner, Freeman & Gilbert, 1995, p. 183) seems very apt at a time in South Africa and internationally where higher education faces transformation challenges. Another telling point is made when it is stated that:

"Culture must be aligned with the other parts of organizational actions, such as planning, organizing, leading, and controlling; indeed, if culture is not aligned with these tasks, then the organization is in for difficult times" (Stoner, Freeman & Gilbert, 1995, p. 186).

It is evident that the concept of a research culture is multidimensional and consequently necessitates a holistic approach to accomplish the best results. In this sense, it can be regarded as an "ecology" (that accommodates the concept of alignment very well) that has to be managed by different role players and at different levels and among different stakeholders in the institution.

Table 1 provides a brief overview of the factors influencing research culture that could be identified from the literature review (although the literature on research is sizeable, the same cannot be said for research culture). It incorporates a synthesis (cf. the last column) that is both literature-based and experientially based on almost two decades of experience as practising researcher and research manager in a research council in South Africa. The table has been formatted to bring together associated themes and to identify by implication the issues on which the authors may not have expressed themselves.

There are however core themes that are clearly associated with a vibrant research culture. These include the co-ordination around goals, a deliberate emphasis on and priority afforded to research, the climate in the department, the importance of regular communication on a range of issues, the appropriateness of different resources and support systems, and the role played by professional rewards. Although the issue of formalisation featured in one column only, the point made about a negative correlation with innovation and research commitment when excessive is significant.

Table 1: The dimensions of a research culture and ethos

<p>Research-enabling factors as identified within a framework related to organisational culture (Bland & Ruffin cited in Pratt, Margaritis and Coy, 1999, p. 44)</p>	<p>Research in the UK on research-enabling factors (West et al., 1998)</p>	<p>Synthesis of research and own experience</p>
<p>Clear goals for co-ordination</p>	<p>Departmental objectives</p> <p>The perception of departmental objectives and the extent to which they are valued have a significant effect on performance and climate</p>	<p>The policy environment (at the organisational level and that dedicated to research)</p>
<p>A research emphasis is maintained</p>	<p>Reflexivity</p> <p>Reflexivity refers to the extent to which departments reflect upon their objectives, strategies or processes and adapt them accordingly</p>	<p>The role of postgraduate students and the necessity of attracting them</p> <p>The identification of research priorities and thereby the identification of showcase/flagship and/or baseline/anchor projects that help the institution mobilise and “exercise” its (budding) research culture</p>
<p>Distinctive culture can be discerned</p>		

<p>Positive group climate</p>	<p>Support for innovation</p> <p>t has been found that climates for innovation correlate well with good research performance (Abbey & Dickson in West et al 1998 p 4) At the heart of the matter are the perceived verbal and practical support for change and new ideas in the department</p>	<p>Measures that are taken to encourage research commitment and involvement (such as regular seminars where work in progress can be discussed report-back on completed projects can take place or a discussion opportunity can be created to resolve difficulties in the execution of a research project)</p>
<p>Decentralised organisation</p>		<p>Network creation and partnerships and Africanising research links (particularly in the Southern African Development Community)</p>
<p>Participative governance is practised</p>	<p>Participation in decision-making</p> <p>The issue here is not so much one of participation as it is one of the degree of autonomy that individuals feel they have in determining their own work as well as the amount of collaboration they perceive in influencing the direction the department takes individual autonomy has been found to be a key factor in research performance and creative output (Witt & Boerkem in West et al 1998 p 4) increased participation in decision-making is also associated with less resistance to change and enhanced chances of innovation occurring (a key feature of research performance) (King et al in West</p>	

<p>Frequent communication</p>	<p>et al. 1998 p 4) Departmental participation Departmental participation refers to the supportive sharing of information. The notion is related to the cohesiveness of the department and the amount of contact and collaboration</p>	<p>A sound flow of formal and informal communication (e.g. from top management to middle-level management and to staff) so that the one hand is aware of what the other is doing and to ensure that mixed signals on organisational priorities are contained to the maximum extent</p>
<p>Appropriate resources, particularly human resources</p>		<p>Staff and capacity development (normally involving research methodology, research proposal writing, scientific writing, attendance of courses and conferences, and visits abroad) to enhance research expertise and output</p> <p>Research-related infrastructure such as information and communication technology, the World Wide Web, its information services such as libraries, and the staffing functions in the information services</p> <p>An adequate project management information system (PMIS) into which researchers and academic staff members can tap and to ensure that (among other things) financial and milestone targets are being met or reasons for non-compliance are recorded</p> <p>Market intelligence (to position the institution and its research) but also to follow up on research</p>

<p>Appropriate group age size and diversity</p> <p>Appropriate rewards are provided</p>	<p>Task orientation</p> <p>Task orientation refers to the departmental monitoring and appraisal of work done</p> <p>Staff relations and career development</p> <p>Warmth and support are related to research performance At issue here are the interpersonal atmosphere in the department career development and the perceived effectiveness of promotion procedures</p> <p>Reward</p> <p>Reward and recognition also correlate well with research performance (Amabile and Witt & Boerkem in West et al 1998 p 4) Moreover a linkage exists between their extent and the degree of innovation that occurs (Abbey & Dickson in West et al 1998 p 4)</p>	<p>opportunities)</p>
<p>A recruitment emphasis in line with organisational priorities</p>		<p>The performance appraisal system (rewards and promotion)</p> <p>Ongoing efforts to promote and monitor research within a quality assurance framework</p> <p>Recruitment of staff (which should take cognisance of the demands made by the research mission of an institution)</p>

Leadership with both research skill and management practice	<p>Planning for the future</p> <p>This feature of research culture relates to the amount of advance planning in departments and the value placed on a longer-term view</p> <p>Administrative efficiency</p> <p>Administrative efficiency is important not least to meet the information needs of quality promotion and assurance procedures This encompasses perceptions of planned work scheduling information flow and effective organisation by senior members of the department</p> <p>Formalisation and bureaucracy</p> <p>Formalisation refers to the administrative component of the work environment and the rules procedures and paperwork driving the research enterprise (among other things) It has been found that "... highly formalized rule-governed departments tended to score low on ratings of research excellence" (Abbey & Dickson in West et al 1998 p 4)</p>	

Given the complex nature of beliefs, the equally complex relationship between attitudes and behaviour, and that behaviour is the result of "... beliefs about situational contingencies and relative motivational factors", it would not be sufficient for management to change attitudes to research only (Pratt et al., 1999, p. 46). A set of beliefs concerning the following matters would have to be changed (Pratt et al., 1999, p. 46):

- What it takes to get promoted;
- the probability of success;
- the levels of support for research;
- the social norms in the organisation;
- there being sufficient time for research; and
- what research is necessary to keep your job.

It must be borne in mind that beliefs, attitudes and values will establish themselves over time (the history of the organisation is therefore relevant), but also through (Pratt et al., 1999, p. 46):

- the behaviour of other members;
- oral and written communication;
- policy manuals, systems and rules; and
- the behaviour of the organisation's management.

As to how organisations change their culture, Williams et al. (in Pratt et al., 1999, p. 50) suggest six main ways that management may use:

- changing the people in the organisation;
- changing people's position in the organisation;
- changing beliefs, attitudes and values;
- changing behaviour;
- changing systems and structures; and
- changing the corporate image.

The literature overview reveals that generally seven factors are related to organisational culture: innovation, stability, an orientation towards people, an orientation towards outcomes and results, an emphasis on being easygoing, attention to detail, and a collaborative or team orientation (Chatman & Jehn in Pfeffer, 1997, p. 122). More specifically, research excellence correlates quite significantly with career development, support for innovation and particularly strongly (but *inversely*) with formalisation:

The stronger the climate for career development and the more support for innovation, the *higher* the research rating. The less formalised and bureaucratic the department, the more positive the research grade. More speculatively, departments that produce outstanding research are characterised by a management that rewards the right people and places an emphasis on promotion and career development. Members of the department do not feel inhibited by procedural technicalities and

bureaucratic quagmires – responsiveness and flexibility enable excellent, innovative research to take place (West et al., 1998, p. 8).

The study further points out that:

... it is important to note that formalization was negatively correlated with all other climate factors. It appears that the more bureaucratic and rule governed a department is, the less ownership and value are attributed to departmental objectives; the less relaxed and friendly the atmosphere; the less sharing of ideas there is; and the less that career development opportunities are perceived to be fair. It also appears to be the case that the more formalized the department is, the less the support for innovation (West et al., 1998, p. 9).

3. SOME STRATEGIES EMPLOYED BY THE PREVIOUS TECHNIKON WITWATERSRAND (NOW UNIVERSITY OF JOHANNESBURG)

In this environment, Technikon Witwatersrand had decided to place the major emphasis to promote a research culture and ethos and scholarship on the following strategies, namely:

- A clear and unequivocal message from top management that academic staff are expected to engage in research and that research outputs will increasingly form part and parcel of staff appraisal, staff recruitment and promotion;
- The appointment of high-level research champions as research fellows within each faculty that can lead by example. The research fellows have a brief that straddles the undertaking of own research, staff development on research and research methodology, and limited teaching and postgraduate supervision;
- A proposed system of career paths for academic and professional staff that allows at a certain stage a choice between three streams, namely teaching, research or management (this strategy was regrettably never implemented);
- The introduction of meaningful financial incentives to academic staff to improve their (vertical) qualifications (a generous bursary scheme) and an arrangement where subsidy income on articles published in accredited journals accrued some financial benefit for the author(s);
- The extension of research monies in the annual budget that academic staff can access with appropriate and quality research proposals. The research topics needed to be linked to priority research domains (determined in terms of national science and technology policy and the commensurate institutional positioning in the interest of accessing funding and making a recognisable contribution to the solution of national needs and challenges);

- In view of the realization that teaching loads of staff are quite high, policy guidelines and alleviation measures had been announced to enable academic staff interested in research, to engage in projects; and
- At the faculty and programme level in particular, corporate policy on research was extended in strategic plans for research that defined objectives, milestones and (measurable) outputs and outcomes to be achieved.

This system had evolved further when research managers were appointed to each faculty. The research manager was to lead by example by managing own research projects. The manager also chaired the Faculty Research Committee where research proposals (mostly proposals linked to master's and doctorates of either academic or postgraduate students, rather than research for non-degree purposes) were quality assured, a key input into the research endeavour. Managers also developed their own inputs to stimulate scholarship, such as regular presentations on research topics, and the development of a resource pack for postgraduate students. Very often an open-door policy was maintained to encourage staff to liaise with the manager on research. Collaborative publication efforts and conference presentations were also part and parcel of the approach to get academic staff to engage in research and publication.

4. CONCLUSION

A number of factors can affect successful change (Williams et al. in Pratt et al., 1999, p. 51):

- an urgently felt need for change;
- the visibility of the criteria for success;
- an external focus;
- commitment from the chief executive;
- strategic change;
- staff involvement and successful organisational communication; and
- the realignment of structures and policies.

To some extent all these factors are active in the institutional environment referred to here. The one thing that is abundantly clear is that the government will not accept a business-as-usual approach in higher education.

It has been argued that the concept of a research culture is multidimensional and that, by its very nature, an institution cannot concentrate on one aspect to the exclusion of all others if a research culture and ethos are to be promoted. The concept of an ecology of factors comes to mind again. This notion in turn implies the notions of co-ordination and strategic planning if anything constructive is to be achieved.

In all fairness, the question can be asked whether a programme that encourages the further inculcation of a research culture will indeed be effective. Waikato University (Pratt et al., 1999, p. 54) feels that it has

achieved much success in its own case. The following changes are mentioned:

- Staff did indeed commit themselves to the changes made, which led to more job satisfaction among them. This also benefited students, who found themselves in a richer learning environment.
- A number of staff have obtained doctorates.
- Academic staff have developed research agendas.
- Although some staff members have been recruited by other management schools, the Waikato Management Studies School is now in a better competitive position to recruit staff. It has consequently been able to develop research networks.
- There are of course staff members who have left the institution either because they did not support the new objectives or were unable to meet the new requirements.
- Time and support must be made available to enable staff to rectify research or teaching weaknesses.

Clearly, although the culture in an academic organisation can be difficult to change and require some time to achieve, it is evident that such complex changes are possible. The institutional scale does not just record certain losses, but also certain significant gains as the dynamic within which it operates is accepted as a challenge that must be met. Time will tell whether the ex-technikons in South Africa will be able to report in similar vain in years to come.

5. BIBLIOGRAPHY

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