

## Science Faculty Research Forum

### Institutional missions and orientations

Given the diversity of defined HE social purposes and goals, and the varied knowledge and diverse graduate needs of our Southern African and wider African economies and societies, no single institution can address the full range of social purposes, goals and needs. Institutions are therefore obliged to make choices regarding their missions and orientations.

These choices include:

- With respect to knowledge production, the choices include the options of or balance between different kinds of scholarship (of discovery, integration, etc.) and the nature of research (fundamental, applied, strategic, developmental)

### Paradoxes, choices and trade-offs

A number of the defined goals, and/or strategies related to goals, may exist in a relationship of intractable tension in so far as we seek for good reasons obliged to pursue them *simultaneously*.

For example, an exclusive concentration on and privileging of fundamental science and research will lead not only to their privileging at the expense of applied and strategic research. The reverse will have other consequences.

To take another example, an exclusive concentration on supporting only established researchers can lead not only to their privileging at the expense of support for emerging researchers but also other unfortunate consequences. Conversely, an exclusive focus on emerging researchers can result in other unpalatable consequences.

It is clear that we can't escape the paradoxes and intractable tensions but must creatively mediate these paradoxes.

The need to pursue a number of goals and strategies that are in tension with one another *simultaneously* means having to confront difficult dilemmas and having to make unenviable choices and decisions. It also means that there can be great difficulties in establishing priorities and in prioritising.

Trade-off's are inevitable. They should be made deliberately with respect to their implications for goals, and made consciously and transparently. The trade-offs and choices that are made should also be communicated in ways that build understanding and secure support from important constituencies.

### **Faculty analytical and planning capability**

In the face of the diverse goals and challenges that face a Faculty, an effective capability for rigorously analysing its social context and for monitoring, evaluating and interpreting dynamics, trajectories and trends is increasingly vital for development. The capabilities to read policy signals and to fathom the trajectories of policies are vital to take advantage of opportunities and minimize potential threats.

Planning is a necessary condition for addressing the myriad demands on the Faculty, for maximising on strengths and exploiting available opportunities, for overcoming weaknesses and minimising constraints, and for dynamic and sustainable development. All areas of institutional life and activities including, fundamentally, academic provision, require periodic review, deliberation and conscious decision-making.

Planning for greater efficiency and effectiveness in relation to Faculty activities is not in competition with autonomy, academic freedom, democracy, equity and quality. There can be and must be imaginative institutional innovation of structures, mechanisms and processes that balance in creative ways the values that are fundamental to the faculty and the University.

As much as planning is necessary, planning must accord to departments and researchers substantial freedom with regard to research matters. Planning must also avoid generating an institutional culture of dull, plodding conformity that stifles imagination, creativity and innovation. There must be space for research programmes with different purposes, methodologies, pedagogies and modes of delivery, and that respond in distinct ways to our varied and changing intellectual, scientific, educational, social, and economic needs.

### **Developing a greater research and postgraduate orientation**

There are many positive features with respect to research and postgraduate studies in the Science Faculty and good foundations for further postgraduate expansion.

However, there are also constraints.

1. The number of academics without Doctorates, imposes limits on the number of academics that can supervise Doctoral students, and therefore on overall Doctoral student registrations.
2. There is insufficient academic space, and inadequate facilities and equipment to support a greater research thrust and larger numbers of postgraduate students.
3. The funds available to the University from external sources and also internally are inadequate for supporting more research and talented postgraduate students, for competitively attracting students from other universities, and sometimes for also retaining outstanding students.

Importantly, there must also be an institutionally self-imposed constraint: any expansion of postgraduate students must not be at the expense of the quality of undergraduate studies and the undergraduate experience for which Rhodes is well-recognised. That is to say, concomitant with any expansion of postgraduate numbers and studies we must continue to maintain among the best undergraduate pass and success rates in South Africa. Nor should any expansion be at the expense of the *quality* of postgraduate supervision.