The global and the local

There is a danger that focusing on internationalisation and foregrounding its (positive) potential obscures a very real flipside, especially pertinent to the altered South African higher education context. The drive to international competitiveness raises a number of issues. First, it suggests a focus on securing and nurturing the top students and the most promising academics, deflecting attention from the challenges facing us in the need to accept and develop weaker students and less prepared academics. Second, in South Africa there are effectively only five out of our 23 universities currently able to compete at this level. This creates a dialectical situation, where the tension between competing demands makes the situation in South Africa—and in the whole African subcontinent—far more complex that an introductory discussion of internationalisation might suggest.

This section has introduced the global research landscape. Its aim was threefold:

1. To expose readers, notably those entering academia, to the dynamics at work in the international academic community and how these dynamics impact on universities and individual researchers.
2. To suggest that, while not all aspects of global trends are warmly received or necessarily appropriate to our southern context, we can nevertheless draw on them to identify principles to assist in the self-evaluation and ultimate success of both institutional and national research efforts.
3. To act as a prompt to emerging researchers when planning their academic careers.

In the section that follows, the aim is to build on the awareness created by the previous discussion on the international research landscape to focus on the local and individual research endeavour. Although the discussion will be grounded in the South African benchmarking model, the process and principles should have relevance beyond this context.

Academic benchmarking: South Africa’s researcher rating system

In 1984 the South African National Research Foundation (NRF) introduced a hierarchical, peer-reviewed ranking system of South Africa’s research-active scientists. For South African universities, NRF ratings testify to the quality of their staff, while for individual researchers a rating affirms research status and provides access to funding. The system, involving international peer review, provides a useful tool for benchmarking the quality of our researchers and our national research system against the best in the world.

Research benchmarking in South Africa has historically been associated with two national imperatives: the development of local research capacity and the funding of...
research. To address both these needs and to acknowledge research quality, the rating system was inaugurated at a time when universities were becoming research-active, and it was acknowledged that teaching could and should be enhanced by energetic research agendas. Hitherto, university-based research was constrained by the lack of available funding and the absence of any co-ordinating national body to direct and organise national research activities.

The rating system distinguishes between:

- world-leading (A)
- internationally recognised (B)
- nationally established researchers (C)
- P and Y, for which younger academics are eligible, accommodate similar distinctions.

Initially the system was for only the 'hard' scientists, but in 2002 it was extended to include the social sciences and humanities, including the creative disciplines. This increased both the number of rated researchers and interest in the system, so that at present approximately 10 per cent of the country's institutionally linked researchers and those based in research centres are rated. While access to funding has increased interest in the rating system, universities themselves attach importance to it as a form of quality assurance and benchmarking, which *inter alia* attracts the best students.

Other features of the system include the following:

- The benchmarking it affords is also about measuring your achievements against those of competitors in the field, serving as a point of reflection and a spur to improvement.
- It is the only national system in South Africa that is able authoritatively to show the performance of universities relative to one another based on clear, explicit and transparent criteria and processes.
- Universities themselves give legitimacy to the system by participating in it.
- It is universities, not individuals, who formally apply for research ratings for their staff. And it is universities that choose to devote resources to the process of obtaining ratings, some investing heavily in the system, others less so.

We turn now to how the rating system works, reflecting briefly on its benefits (intended and unintended) and acknowledging criticisms and weaknesses, especially when viewed as a benchmarking mechanism.

**How the system works**

The NRF issues an annual call, directed through South African universities and research institutes, inviting researchers to apply for rating. Applicants complete an online form,
which includes listing all publications and other educational and employment details, and completing four narrative sections. So, if you are applying, you will need, in sequential order, to supply the following:

- your biographical information
- description of your completed research
- self-assessment of your research
- your future research.

Taken together, these narrative sections require you to write introspective historical accounts of your research achievements, including a description of the key research contributions you have made. You need to show that your research:

- is coherent (has a clear focus)
- has had impact
- provides evidence of 'quality'.

Your university, through a team of senior scholars, reviews the application and recommends a particular rating. Universities may decline to forward applications to the NRF if they doubt their potential for success, thus avoiding unhappiness among aspiring applicants.

While researchers are preparing their rating applications, the NRF specialist committees, which will preside over the peer-review process, are being constituted. There are over 20 specialist committees comprising invited scholars, who are established and usually fairly senior in their fields, to cover the full spectrum of research activity. Working under a convenor, it is a committee's task to select reviewers and then assess the reports that these reviewers submit to the NRF—tasks vital for the integrity and legitimacy of the rating process. Ultimate rating is based solely on the reports that peers (reviewers) submit and not on the opinions of the specialist committees or any other part of the NRF apparatus. The role of the NRF is to source the peer-review reports and then to interpret them.

Each applicant nominates a number of reviewers, three or four of whom will be chosen to complement an equal number of reviewers of the specialist committee's own choice and whose identity is not known to the applicant. These reviewers are approached by the NRF and invited to write reports on the applicant's work. They are expected to read at least the submission of the applicant plus the five best identified research outputs produced in the preceding eight years.

Towards the end of the year, each specialist committee meets to consider the rating applications. Their jobs now are to make two sets of judgements:

- Are the reviewer reports excellent, good or unsatisfactory (and therefore unusable)?
Do the reports suggest that the applicant is a world leader (A), internationally recognised (B) or an established researcher (C)? Applications in the young researcher category are similarly assessed.

When all the reports have been processed, a successful applicant is awarded a rating, which is arrived at by considering all the reports and reaching a conclusion.

At the end of the process each applicant receives a feedback letter indicating the rating awarded and the reasons for the rating, including feedback from the reviewers and their response rate. Unsuccessful applicants are similarly informed, and those who wish to contest the outcomes may appeal in a process formally endorsed by their own university. The duty of the appellant is to indicate the grounds for dissatisfaction and then to approach the NRF Ratings Appeal Committee, which meets a number of times each year to consider such cases.

The rating system has both strengths and weaknesses and faces a number of challenges.

**Strengths**

- As a national system it creates a single measure for all researchers across disciplines.
- It is a merit-based system with criteria clearly stated and processes visible and transparent, rendering it credible and fair.
- The use of peer review makes the rating system a robust measure of quality, neatly dovetailing with other existing measures of performance for individuals and universities in a competitive global research environment.
- At the level of the individual researcher, the system
  - allows you to check your status relative to colleagues and others working in the field
  - can act as an incentive to improve the quality of your research and increase quantity, and
  - provides a perspective on your career progress and becomes an instrument for career planning with strategic research choices.
- The system remains essentially unchanged and is thus a mature system, developed over time to high levels of sophistication and efficiency.
- The system does not favour one type of research over another, and has managed to retain an apolitical position.

**Weaknesses**

Many of its weaknesses are recognised and attempts are being made to address these.

- The system depends on the expertise and willingness of reviewers, and, as the
system has grown, reviewer fatigue has threatened the viability and credibility of the system.

- There is frequently lack of familiarity, especially among overseas reviewers, with the rating system itself. For example, reviewers' understanding of the system as being one requiring a testimonial, rather than an evaluation, may render their reports unusable.
- There are weaknesses internal to the system, such as disentangling an applicant from a research team:
  - Specialist committees are obliged to make a finding about the individual's contribution.
  - Reviewer discrepancies may arise in interpreting terms such as 'a leading international scholar in their field' (A category requirement).
- A strong research focus demonstrating coherence is a requirement for a good NRF rating, favouring those with a narrow focus and working against those doing inter- or transdisciplinary work, for which no evaluative provision is made.

**Limitations and challenges**

Apart from overt weaknesses, there are also limitations to what ratings can say or do:

- Reviewers' reports are intended to safeguard against arbitrary or skewed outcomes, yet the choice of a particular reviewer may well tilt a rating one way or the other, despite a sophisticated system of scrutiny.
- Because the rating system operates in an environment in which there are other measures in place to evaluate research—the various bibliometric measures, for example—there may be a discrepancy between the NRF rating and the profile of the researcher gauged by other measures.
- The rating system emerged in order to promote scientific research, in the narrow sense. It was 18 years before it was extended to the humanities and social sciences, leading to a concern that the system is biased against the humanities. This perception stems in part from the ease with which journal articles are counted and weighted and, by comparison, the difficulty in counting and weighting books and book chapters (which are more commonly produced by scholars in the humanities).

But a steady increase in the number of humanities ratings in recent years, not least in the A category, indicates that the system may be normalising. In one notable humanities case some years ago, an A rating was awarded primarily for a single monograph.
GROWING THE NEXT GENERATION OF RESEARCHERS

Moving on
Having introduced the South African NRF research rating system we move on to consider what may be gleaned from the process by those for whom the system is not relevant (those from outside South Africa); those who are new researchers; and those who, for various reasons, opt not to go 'the rating route'.

Adapting the rating application for personal research benchmarking
Some of the exercises required for a rating application are useful for any researcher wishing to assess his or her own research, and could be adapted by institutions as part of internal research quality assurance and benchmarking exercises.

There are three sections of the application that are particularly useful:

1. a brief description of your completed research
2. a self-assessment of your research
3. a plan for ongoing and future research.

Each of these sections requires a narrative description, meaning that far more thought needs to go into the exercise than would be the case with lists, bullet points and graphic representations of your research story. For some academics, in whose disciplines writing is not a central activity, this poses quite a challenge. The challenge is intensified by the word limit imposed: approximately 800 words, or two A4 pages, for the description of completed research and 400 words each for the impact (self-assessment) and planning sections: not only a story, but a succinct one too! The word limit poses a different sort of challenge to those who love writing; it keeps the narrative focused and prevents rambling.

In evaluating research, reviewers look mainly for three things: coherence, quality and impact. Quantity of output is obviously important, but it is subsidiary to these other features. In each of the three narratives the onus is on you as the researcher to demonstrate these elements in your research. The exercise, when done for a rating application, invites assessment of the past eight years of research, but, for newer academics wishing to gauge their progress to date, it can be adapted accordingly.

Brief description of completed research: Your research story
In an earlier section of the rating form you are required to list your research outputs over the past eight years. You are now invited to engage with that completed work in telling the story of your research, highlighting your best achievements along the way. A story necessarily has links between one stage and the next, demonstrating how the plot holds together and unfolds. Your research story (verified by your outputs) needs to do likewise, demonstrating how you moved from one stage or project to the next, and how your present work is connected to what went before. In other words, you are showing the
coherence in your research. If you cannot do this, you have a problem. It suggests that you may be jumping from one topic that holds your interest to another, without seeing any project through to the next level.

This task causes panic among some researchers, who find it difficult to identify the thread running through their research. In a minority of cases there is no thread and this is a wake-up call to reassess where you are going with your research. It may require some guidance from a more experienced colleague and it certainly requires some serious research planning. Over the years, many people have consulted us in a panic about this very issue, but, for the majority, some careful thought and digging beneath the surface helps them to discern the thread. The point is that usually there is something sparked off by a project, perhaps in doing research for an article, which leads into a new but related area for the next one. The link is there, even if it is not immediately obvious. Frequently this is in the form of some underlying theme that opens itself to development in a number of ways, the one thing leading to the next. It is the underlying theme—which should, however, not be too broad to make it meaningless—that is critical for demonstrating coherence or connectedness in the research.

In telling the story of your completed research, you should desist from referring to anticipated outputs, for example, an article still under review or an exhibition scheduled for later in the year. The object of this exercise is to reflect on what has already appeared, not that which is still to come.

Self-assessment of research outputs: Best outputs and their impact

Having engaged with your research journey, you are now asked to assess what you have produced. The self-assessment should also be in the form of a narrative, with special emphasis on those contributions listed among the best research outputs. This is an opportunity to provide an account of how these outputs reflect the development and growth of your research during recent years, and what impact they have had. Mention should be made of instances where you have, in your view, made noteworthy contributions to the extension of knowledge in your field, as well as to how your work relates to other work being done in your field. For a rating application the self-assessment should relate to research done during the last eight years, but again, for less experienced researchers who are doing this as a personal assessment exercise, this time period can be adjusted.

Where more than one person has contributed to the research outputs you have listed, in this section you should indicate your own contribution to the team effort. This draws attention to a good practice: keeping a log of your research, noting all the details that you might need ready access to later. In team projects with co-authored articles you should carefully note your role in the project and the publications.

Another important issue concerns the replication/duplication of outputs, for example, a conference proceeding that has been reworked into a full journal article. In the self-assessment exercise, separating the two pieces of work is discouraged, although the
practice itself is acceptable. At another level, a fairly common but dubious practice is to use essentially the same material for a number of publications, with the aim of increasing your research output. This is done by repackaging and perhaps tweaking the material, and giving articles different titles. It is self-delusory to imagine that in this case quantity equates with quality, and ultimately the practice will work against you. So, in assessing your work, be honest with yourself.

**Ongoing and planned future research: Where to from here?**

In Part 2 of this book we look in more detail at the need for research planning, which components should feature in it, and the interplay between them. One of the keys to success as a researcher is to ‘keep the ball rolling’. This means getting into a rhythm where there is always something about to be completed, something midway, something being started, and something else being envisioned—in a way that demonstrates coherence and continuity in your research. This requires careful planning.

A third exercise required in an NRF rating application is to provide a narrative of your ongoing and planned future research. This should include your research vision for the next five years as well as a concise discussion of your envisaged research activities during this period, showing how your completed research will be carried forward. The plan should confirm your research trajectory: the direction in which the research is headed.

Although anticipated outputs are precluded from the other narrative sections, this is the place to mention them: planned exhibitions; articles ‘in press’, ‘accepted’ or ‘submitted’; a patent that has been applied for; pending PhD registration/graduation, etc.

A mistake made by many early-career academics is to equate conference presentations with research output. This is not the case. The presentation is part of the journey towards an output but it is not the product itself. If conferences are mentioned in your narrative plan, they should always be tied to an anticipated, peer-reviewed output: a publication, a PhD proposal, a thesis chapter, etc.

**The value of the exercises**

These three exercises can become useful tools in assessing your research status and development. They can be used as documents-in-process, updated each year and providing content for a number of research ‘tick boxes’ with which to gauge your progress.

**PERSPECTIVE**

I wrote my NRF rating application four years after graduating with my PhD. This, together with the fact that I was within the relevant age bracket, meant that I was eligible for a young scientist rating, and the idea of securing some funding for my research was my main motivation. I was also aware that my profile as a researcher
was going to be inspected and assessed, something I did not particularly look forward to. In fact, I dreaded it! Fortunately, my university had a process in place to help me. It was good to know that all candidates would receive dedicated attention to ensure we were putting our best foot forward: both the ‘green shoots’ and the ‘well-rooted’ were being accompanied on this journey.

Being a natural scientist and foreign, words in English are not my strong suit! I prefer to use graphs and tables to put my point across, which is encouraged by a rather dry and factual writing style in my discipline. So there I was facing a daunting task: writing four lengthy narratives to give a good account of my work. I had to use the right type of vocabulary in order to inspire confidence in the reviewers with regards to my skills, my completed work and my future in research. It was a real balancing act to write about my achievements without sounding either overly arrogant or too modest.

I wrote a first ‘naïve’ version of my application at the beginning of the process. When I submitted the polished application four months later, it had transformed into a professional, sharp, yet true assessment of who I was as a researcher. Through reviews and advice given by my research colleagues and the university task team, I developed a better sense of my identity as a researcher, my skills and my shortfalls, and it allowed me to project myself and identify a trajectory for my research and career. Looking at these narratives boosted my confidence and helped me to focus and prioritise.

In the end, I secured a successful rating, but, in view of all I had gained from the process, this was just the cherry on top of the cake.

Gaëlle Ramon

Conclusion

This chapter has sought to highlight challenges we face in the higher education environment, largely as a result of the internationalisation process. In tandem with the challenges, other issues surface, such as the need for things like quality assurance measures. Another is the imperative to develop strategies that meet the mutating demands of research funders, one of which is the call for more interdisciplinary research, capable of addressing complex issues. This is the subject of Chapter 3.