



UNIVERSITY OF WESTERN CAPE (UWC)

RESEARCH POLICY: INTRODUCTION AND DEFINING FRAMEWORK

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UNIVERSITY of the
WESTERN CAPE

INTRODUCTION

This document presents the new Research Policy of the University, developed in tandem with UWC's Institutional Operating Plan for the period 2010-2014. It has been informed by the significant achievements in the past 10 years and is underpinned by the desire to escalate the research and development enterprise of the University of the Western Cape to higher levels, in so doing to become a major player on the national and international landscape.

The Wider Research Environment

The past ten years have seen a transformation of South African higher education by a number of social and other forces: increased access to higher education and consequent demographic change; government funding policy; higher education research funding policy, etc. This has not only questioned the role of the University in contemporary South Africa, but has also presented different challenges. However, new ideas and intellectual capital still remain the hub of the University. Universities are producers of knowledge and innovation and developers of talent. They do this largely by conducting and openly publishing research and by educating students. Universities that were and still are predominantly teaching-focussed are increasingly evolving into research-oriented institutions. It is within this wider context that the Research Policy of UWC is located.

Research Developments at UWC

UWC is slowly but confidently evolving from a teaching institution into an institution with relatively sophisticated research activities. The types of research performed at UWC have vastly expanded and improved in the past ten years. Teaching is still the core activity but research is increasingly taking centre stage. Thus, the University can be classified as an emergent research institution with increasing staff participation in research and growth in its Masters and Doctoral programmes.

Types of Research at UWC

Research at the University can be broadly classified as follows:

Basic or Pure Research: Basic or pure research is new, explanatory problem solving. The purpose is to generate new theoretical or experimental knowledge and the process includes thinking in a disciplined manner about why some natural or human phenomena occur. The primary motivation is to increase knowledge for the sake of understanding.

Applied Research: Applied research is considered generally to be original problem-solving activities directed primarily toward a specific utilitarian purpose. It is a combination of thinking and adaptation of research that develops ideas into some useful devices or processes, including patents. Applied research has its input from social utility and academics are involved in solving problems that have direct utility for a vocational field or commercial establishment. This includes research undertaken to inform policy formulation. It must be noted that the development of patents and prototypes and the commercialisation of University intellectual property are important components of Applied Research.

The Defining Framework

In revising its existing research policy, the University initially paused to consider what it was that UWC wanted to achieve in going forward from where it was presently positioned. This led to the development and acceptance by Senate of the Defining Framework (Section 1), in which the need for eight sub-policies was identified. The latter were developed by eight teams made up of the University's established and promising researchers and are presented in Sections 2 to 10.

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UNIVERSITY of the WESTERN CAPE

RESEARCH POLICY

SECTION 1: DEFINING FRAMEWORK

Universities by definition are the centres for knowledge production and scholarship. The inherent academic freedom associated with Universities allows the generation of new knowledge through curiosity-driven (or pure) research, applied research or strategic research. However, a University does not function in a manner that is independent of the society within which it is located. As an obligation to society, a University is expected to transfer knowledge for the betterment of the society through the promotion of research for socio-economic development. Therefore, a University not only produces new knowledge but also engages with existing knowledge in applying it towards addressing societal challenges.

A Research Policy for the University of the Western Cape (UWC) must take into consideration UWC's long term goals defined by its vision and mission. However, it must also recognize the reality of the current situation so that it is able to promote and support the research enterprise of the University and respond to the current regional and national challenges in Research & Development (R&D). In such a context a Research Policy is always a dynamic document with shifting goals as time evolves, justifying the need for regular review.

UWC's mission statement emphasizes that; "The University of the Western Cape is a national university, alert to its African and international context as it strives to be a place of quality, a place to grow. It is committed to excellence in teaching, learning and research, to nurturing the cultural diversity of South Africa, and to responding in critical and creative ways to the needs of a society in transition". The mission statement therefore gives greater clarity and meaning to what is expected of the University in producing and disseminating knowledge, that is, to strive for excellence in this role. However, it also frames the specific societal context of which UWC is part and thus what shapes the knowledge environment.

The University's response to the current situation is strongly shaped by the Institutional Operating Plan (IOP) which draws attention to areas of significance for the institution's development and outlines its plans for operationalising its strategic objectives. The IOP reasserts UWC's aims to be a significant research and research development university. It makes a strong case for the importance of research in building new knowledge and its role in the enrichment of the curriculum and thus in the quality of the teaching the University has to offer. It also locates the University's research function within the context of UWC's commitment to being an engaged university. To this end, our research should strive to embrace and deepen our understanding of the complexities of contemporary South Africa in a globalised world where the "congruencies and contradictions between transformation and global competitiveness" are central to our societal challenges (IOP, 2004: 22).

Collectively these imperatives demand of the University the need to underpin all research with a focus on excellence through research programmes that are at the very cutting edge of new knowledge production and transfer, nationally, regionally and internationally. In doing so, the University has to encourage cross-discipline collaboration and the establishment of teams of researchers with the necessary critical mass to ensure sustainability of the research programmes.

A natural consequence of this process is the identification and establishment of research niche areas defined by entities such as research units, centres and institutes.

A major national concern in R&D is the aging profile of the productive South African researchers. In 1990, 20% of the research output in the form of journal articles was produced by persons over the age of 50 years, in the year 2000 the proportion rose to 50%. In response to this challenge of training the next generation of research leaders, the National Research Foundation has introduced a special programme called the "SA PhD Project" to increase the country's doctoral output. This is also a challenge faced by UWC. Presently some 50% of our full-time academic staff do not have doctoral qualifications. This not only has a negative effect on our research outputs in the form of journal articles, chapters in books, books, etc., it also limits UWC's capacity to offer postgraduate programmes at the Masters and Doctoral level. Thereby, the growth in the postgraduate student population which the University would like to advance to the region of 33% from its present figure of 20% of the total student population is hampered.

In addition, despite national positive interventions since 1994, for example, the NRF's Thuthuka programme, South Africa has not adequately addressed the disadvantages previously encountered by Black (African, Coloured and Indian) male and female (irrespective of race) academics in higher education. The challenge of elevating academics from the designated group into research leadership positions is, indeed, a real one. Therefore the need for a mentorship programme in accelerating the development of talented young researchers cannot be overemphasized. Here, the University needs to devise a mechanism to exploit the knowledge and expertise of the relatively large cohort of retired academics with outstanding research profiles in the wider Western Cape region. They can play an invaluable role in the mentoring of young researchers.

Within the staff development strategy, the University must revisit and strengthen its set of criteria for honorary research appointments of persons, external to the University, who are integrally involved in research programmes in the University. Such persons will not only publish in the name of the University but also co-supervise students and mentor younger staff.

Therefore, UWC has to develop a strategic plan for staff development to address the abovementioned issues.

For UWC to become a global player in the research arena, its research programmes have to be at the cutting edge, alongside the leading international research institutions. This can be achieved through carefully selected collaborative partnerships with the leading international institutions in research areas that are identified as our niche areas. Such partnerships will allow for staff and student exchanges, joint teaching and supervision, as well as joint preparation of research proposals for funding, e.g. to the European Union Programmes.

However, just as the University is committed to excellence in knowledge production, it is equally committed to maintaining and fostering the dynamic link between knowledge generation and the transmission of knowledge towards the realization of society's hopes. Therefore, while promoting curiosity-driven (or pure) and applied research, UWC must continuously emphasise the need for strategic research that leads to national policy development or attempts to solve societal challenges in partnership with the affected sector of our society.

In the South African landscape, Universities do not have a monopoly on knowledge development. Science Councils such as the Council for Industrial Research (CSIR), the

Medical Research Council (MRC) and the Agricultural Research Council (ARC), national research facilities such as iThemba Labs, industrial organizations (e.g. SASOL), para-statal organizations (e.g. ESKOM) and commercial organizations are involved in R&D towards a strong knowledge economy. It is important for UWC to establish close partnerships with these organizations so that it makes a meaningful contribution to national growth and development.

A strategic plan for collaborations of the types discussed above is important for the University.

Many South African universities have introduced a research incentive scheme for staff members in an attempt to enhance their outputs. In this regard UWC is not an exception. However, the University needs to revisit the existing incentive scheme to strengthen it. UWC needs to devise a mechanism to encourage academic staff members to take on the supervision of more doctoral students and graduate them in the shortest time possible without compromising standards, as well as publish research findings jointly with the students. Despite its shortcomings, the NRF rating and evaluation system is the only available mechanism for international peer evaluation of one's standing as a researcher. UWC presently ranks 5th in the country (behind 4 historically advantaged institutions) for the proportion of establishment academic staff members with a rating. The University needs to introduce as part of the incentive scheme a mechanism that will encourage staff members to publish more in high impact journals in their respective disciplines, thereby applying and qualifying for a valid NRF-rating.

Postdoctoral fellows have a huge positive impact on the research output of an institution. For a start, UWC needs to explore the creation of postdoctoral fellowships in its established research niche areas. The interaction with postdoctoral fellows will provide an enriching experience for the cohort of Masters and Doctoral students in these research niche areas.

An overall review of the research incentive scheme is needed to take the University forward.

An institution that desires to be a research-intensive University has to show a genuine commitment to that end by providing support to staff from its own financial budget. To a certain level, UWC presently achieves this through a generous support scheme for conference attendance and small grants for research projects. However, given that research funding is an investment for which the University expects defined outcomes, e.g. completion of doctoral studies or achievement of a valid NRF rating, such internal support must not be seen as "support for life" but as a mechanism to develop the staff member into an independent researcher with an established research niche area. This then makes it necessary for the staff member to move away from a reliance on internal University support to accessing external research grants, e.g. through NRF programmes.

In strengthening the outcomes-focussed internal research grants to younger staff members, in a concomitant manner, the University needs to find innovative and creative ways of supporting those at the other end of the spectrum - at the very cutting edge. Such support mechanisms could include funding for research assistants, seed funds to develop major grant proposals and leverage funding to attract external research grants.

Therefore, it is in the long-term interest of the University to review the internal research funding scheme.

Several of the University's research programmes, especially those that may impact on socio-economic development, use humans or animals as subjects.

Therefore the integrity of the research process has to be beyond reproach. Moreover, plagiarism and similar forms of misconduct by individual researchers (both staff and students) can impact on the integrity of the Institution. The need for a code of ethics is essential. Consequently, it is imperative that UWC's research agenda is underpinned by a well structured research ethics policy, which must be reviewed systematically in response to the changing research landscape. The University has to define an implementation plan so that every person (staff and postgraduate students) engaging in research for the first time is enlightened on the importance of ethics in research at the outset, prior to embarking on the research programme.

Consequently, the University needs to develop a comprehensive research ethics policy.

Recent national developments, e.g. the proposed establishment of the Technology Innovation Agency and the Bill on intellectual property rights from publicly funded research and development, makes it imperative for higher education institutions to address issues relating to protection of intellectual property, commercialization and spin-off companies. In this regard, UWC has to proactively develop a policy that articulates the University's position on these matters in line with national policies.

The University has to develop a policy document on the protection of intellectual property and the commercialization thereof.

As indicated above, in defining its research agenda, UWC will benchmark against the highest of international standards. This is so because the University desires to have an impact on the international stage. To achieve this it is essential that UWC aggressively markets its research programmes and outputs. Proper marketing will attract postgraduate students and more international collaborative partnerships, as well as inspire the younger researchers in the University.

Hence, a strategic plan to market the research enterprise at the University is essential.

The above discussion points towards the University's Research Policy articulating strategic plans in the following areas:

- 1. Excellence in Research: Identification of Research Niche Areas; Establishment of Research Units, Centres and Institutes.**
- 2. Research Capacity Development: Attainment of Doctoral Qualification; Black male and woman academics into research leadership; Harnessing the expertise of retired research scholars; Honorary research appointments.**
- 3. Strategic Research Partnerships: Internationalization; Collaboration with Science Councils, Commerce and Industry; Partnerships for an Engaged University.**
- 4. Research Incentive Scheme: Research Publications, Graduating Doctoral Students; NRF Rating, Postdoctoral Fellowships.**
- 5. Internal Research Funding Scheme: conference attendance; support for research projects, research assistants, seed funding, leverage funding, research equipment.**

6. **Research Ethics Policy: animal experimentation; humanities and social science research; research ethics education.**
7. **Protection of Intellectual Property and Commercialization thereof.**
8. **Marketing of Research: publications; websites, media.**

These sub-policies will be developed separately. It must be noted that due to different levels of relevant internal and external development, all of the sub-policies will not necessarily be established simultaneously.

It is important to note that the set of policies being developed have to be implemented in an appropriate enabling research environment. This implies effective and efficient services from the support divisions of the University, e.g. Finance Department; Student Administration, etc. The continuous engagement between the support divisions and the academic sector in designing the best way forward will contribute immensely towards taking joint ownership of the research enterprise of UWC.

