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## Postgraduate Supervision Literature Review: The Doctorate in South Africa and Postgraduate Supervision

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Reimagined**

# Literature Review: The Doctorate in South Africa and Postgraduate Supervision

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## Abbreviations and acronyms

AD	Academic development
CEO	Chief Executive Officer
CHE	Council on Higher Education
DHET	Department of Higher Education and Technology
DST	Department of Science and Technology
HBU	Historically black university
HE	Higher education
NPC	National Planning Commission
NRF	National Research Foundation
ODeL	Open Distance eLearning
SADC	Southern African Development Community
SoTL	Scholarship of teaching and learning
STEM	Science, Technology, Engineering and Maths
UK	United Kingdom
USA	United States of America
USAf	Universities South Africa

# Overview

## Introduction

This section identifies current issues and active research concerns in postgraduate supervision in the South African context. It is not a comprehensive analysis of the extensive international literature on the topic; however, international sources are included to highlight common themes as well as differences in approach to doctorate and postgraduate supervision.

## South African Context and Policy Drivers

South Africa's higher education system has grown at undergraduate and postgraduate levels since liberation in 1994. The growth and diversity of the student body requires increased supervision capacity and new supervision modes. Growth has taken place despite substantial and repeated budget cuts, placing significant pressures on university leaders and managers, academic staff and students.

## Social Justice, Decolonisation, Equity

This section links national calls for decolonisation of the curriculum to national and international supervision models, pedagogy, language and research modes and methodologies. Postgraduate supervision practice in South Africa continues to rely on traditional models and conventions imported from the UK and Europe, often to its detriment and contributing to the marginalisation of African knowledge systems.

## The Purpose of a PhD

The purpose and trajectory of the doctorate are controversial within South Africa and internationally. Backhouse (2011) identifies three emerging 'doctoral discourses' in South Africa, each with a distinct purpose and implications for policy and practice. The discourses are the traditional or scholarly view of the PhD, the labour market discourse and the ongoing personal and professional discourse.

## Doctoral Degrees and Standard, Economic Impact and Student Experiences

We begin with an overview of the new standard for two forms of doctorate in South Africa and then turn to the preoccupation, in South Africa and elsewhere, with measuring the economic impact of research and the doctorate at the expense of other forms of investment. A study by Herman and Kombe (2019) documents the loneliness and alienation of local and international postgraduate students studying in South Africa.

## Professional Development of Doctoral Candidates and Supervisors

The mission of academic development centres in research universities is changing from a focus on the professional development of academic staff to promoting awareness of social injustices that impact student learning negatively.

## **Literacy Practices**

This section highlights the alienation that many black South African students experience when they encounter Western literacy discourses and practices at university. Academic developers and postgraduate supervisors should develop ways to help students feel at home with the 'new literacies' required for successful study.

## **Gender and the Leaky Postgraduate Pipeline**

The leaky pipeline is a metaphor for the low progression and retention rates of postgraduate students in South Africa. This section examines how academics and policymakers conceive of attrition and how they attempt to reduce it. Internationally, the leaky pipeline refers to the exclusion of women academics from completing higher degrees and from opportunities for promotion and advancement.

## **Scholarship of Teaching and Learning (SoTL)**

This section outlines the purposes and benefits of SoTL nationally and internationally and then turns to the post-1994 development of Academic Development Centres and Centres for Learning and Teaching. These centres now offer professional development and education opportunities to academic staff, including courses for postgraduate supervisors.

## **Models of Supervision**

Alternatives to the one-on-one or master-apprentice model of supervision are being implemented as new technologies, more diverse student populations and new modes of conducting research lead to alternative ways of supervising postgraduate students: for example in teams, networks and cohorts. The benefits of coaching and mentoring are discussed.

## **Doctoral Pedagogy**

This section argues that teaching at doctoral level is complex, requires specialised skills and is dependent on good communication, mutual respect and understanding between the supervisor and student. Practical ways to develop such attributes and skills are proposed.

# 1. Introduction

The purpose of this literature review is to provide a broad overview of the South African supervision and PhD context and to identify current issues and key research areas. Sections include the national context, statistics and policy; social justice and decolonisation; types of PhD and models of supervision; purposes of a doctoral degree; postgraduate pedagogy and identity; interventions and research capacity development for doctoral candidates; professional development for supervisors; career and industry influence; graduate attributes and research competencies; literacies; and the Scholarship of Teaching and Learning.

The review is divided into sections relating to published research in postgraduate supervision, mainly in South Africa in the last ten years (2010-2021). There are also references to some key publications before 2010 as well as comparisons with studies conducted in Australia, New Zealand, the UK and other African countries. A number of studies by international researchers have been in collaboration with South African researchers or within the local context.

With the assistance of librarians at the University of Johannesburg and University of the Witwatersrand, we searched peer reviewed articles and books as well as online sites such as Researchgate, 'Connected papers',<sup>1</sup> Enhancing Postgraduate Environments, National Research Foundation (NRF), Council of Higher Education (CHE), Department of Higher Education and Training (DHET), StatsSA, the Stellenbosch Supervision Conference, and Quality in Postgraduate Research (QPR)<sup>2</sup>, Times Higher Education<sup>3</sup> and University World News.

Attempting to be inclusive of key researchers in the field, we summarise key findings and debates, changing trends and gaps in this knowledge area.

## 2. South African Context and Policy Drivers

*...around the world universities are experiencing new fundamental pressures whether they be severe funding cuts, the erosion of institutional autonomy and academic freedom and deep attacks on what are seen to be some form or other of elitism.*  
(Bawa, 2018: 12)

Bawa, the CEO of Universities South Africa (USAf), goes on to claim that, while universities are more productive than ever, they lack societal and government support (Bawa, 2020). The success in productivity (at least in measurable outputs) masks the concerns of university students who push against the untransformed institutions as well as the economic barriers to gaining access. An immediate paradox is clear in the current situation. Demands for free higher education need to be met along with decolonisation of structures, spaces, curricula, culture and language policies. It should be noted that the doctoral degree is the most highly subsidised higher education qualification (van Schalkwyk et al., 2020). However, in early 2021,

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<sup>1</sup> <https://www.connectedpapers.com/>

<sup>2</sup> <http://www.qpr.edu.au/>

<sup>3</sup> <https://www.timeshighereducation.com/>

DHET had a budget cut of R10-billion due to Covid-19 budget adjustments.<sup>4</sup> These stringency measures come within the context of severe unemployment, desperate poverty and inequality. While universities are receiving subsidies, it is ever more necessary for them to focus on the needs and priorities of society. As Cloete (2020) points out, African universities have not contributed sufficiently to societies' needs, a point also made by Maringe (2017). In an appallingly unequal country with pressing and competing needs and dismal conditions in many schools, *some* of its universities are still ranked in the world's top 500.<sup>5</sup> While this is seen as an achievement and does not preclude social relevance (Kupe, 2021), more needs to be done in doctoral, postdoctoral and senior research to find African solutions to societal problems through widening the perception of what counts as quality and excellence.

The importance of the doctorate has increased globally as well as in South Africa (Cloete, Mouton & Sheppard, 2015); the importance of collaboration is therefore increasing with the need for examiners and research partnerships. As South African researchers aim to strengthen their global connections, Rensburg, Motala and David (2015: 91) confirmed a number of years ago out that there is a need for international collaboration that is "marked by a common commitment to sound academic values, scientific integrity, ethics and social responsibility".

At least up until the Covid-19 disruption, growth in the South African higher education system had continued at both the undergraduate and postgraduate levels. Just over 3300 doctoral students graduated in 2018, up from 973 in 2000 and 1420 in 2010. The Department of Science and Technology (DST) reported that the 2030 target of its 2008 Ten-year Innovation Plan (DST, 2008) and the National Research and Development Strategy (DST, 2002) to produce 5000 PhDs per year by 2030 may be achieved. A recent report by SciSTIP on *The State of the South African Research Enterprise* showed that this target appeared achievable under certain conditions (Mouton, Basson, Treptow et al., 2019).

However, more recently Bawa wrote in *University World News* that the DHET budget cuts may negatively affect the country's ability to meet the doctoral graduate targets.<sup>6</sup> Underlying this dilemma is the extent of inequality within the higher education system (Bouhey, Wels & van den Heuvel, 2017).

The country carries a legacy of separation of resources and purposes through which, under apartheid, historically black universities (HBUs) were "dissuaded or even forbidden from offering postgraduate education" (McKenna, 2018:1). The system remains largely elite, with low participation and high attrition rates (Rensburg, Motala & David, 2015). Typically, HBUs still lack research infrastructure and do not have a ready source of alumni financial support. While some argue for differentiation across the HE section, McKenna (2018:2) argues that

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<sup>4</sup> <https://www.dailymaverick.co.za/article/2021-02-25-educating-the-countrys-future-is-an-investment-not-an-expense/>

<sup>5</sup> <https://www.topuniversities.com/university-rankings/world-university-rankings/2021>

<sup>6</sup> <https://www.universityworldnews.com/post.php?story=202007230657559>

“the country’s history makes any real move towards institutional differentiation a no-go area.”

Another concern emerging with increased urgency is the need for remote supervision which has been written about in the context of Open Distance eLearning (ODEL) or online learning (Morozov & Guerin, 2021). Concerns about lack of online connectivity, feelings of isolation and unfamiliar supervision practices are likely to increase in the current online learning context. Weaknesses in the system of doctoral education identified by Manyike (2017:1) include “the selection and allocation of postgraduate students to supervisors without consultation; the requirements for intensive guidance during the process of writing the thesis to meet the needs of under-prepared (sic) students; and the difficulties inherent in the ODeL model, which depended primarily on written communication, especially for academically weak students.” An additional factor is the reduced supervisory capacity; only 45% of permanent academic staff have doctoral degrees (DHET Annual Report, 2018-2019) and there are insufficient supervisors in the system for the increasing numbers of students (Wingfield, 2012). Wingfield also claims that three PhD students is the maximum that an average supervisor may realistically manage. Of course, the actual number of students under one supervisor is often much higher. This contributes to the concern about the quality of the supervision and the doctoral research and is a challenge globally, not only in South Africa (World Bank, 2018; UNESCO, 2013/14). In all universities, the higher degrees policy stipulates the requirements of a doctoral programme as well as admission requirements. However, the completion rate of doctoral students in South Africa is worrying. So is supervisor capacity; the number of doctoral graduates produced per year by each doctorate-holding staff member is 0.28 (Mouton, van Lill, Botha, Boshoff, Valentine, Cloete & Sheppard, 2015). Herman (2017:49) states that there is an “urgent need to train supervisors.” This topic is taken up in a later section of the review.

It is not only supervisor capacity that contributes to low doctoral graduation numbers. Numerous factors contribute to the low throughput and graduation rates, lack of supervision capacity and concerns about the quality of research. These include possibly unrealistic time pressures; academic staff who reluctantly undertake the doctoral degree as compliance for tenure or promotion rather than in pursuit of meaningful knowledge and learning; and the extremely unequal higher education sector.

The National Planning Commission (2013) expects the percentage of academic staff with PhDs to increase from 34% to 75% by 2030. Universities are expected to produce more than 100 doctoral candidates per annum per million of the population and to increase the number of postgraduate students to 25% of total enrolments by that year (NPC, 2011). League tables show that South African universities vary widely in their numbers of doctoral staff and students (Mouton, Boshoff & James, 2015). “Africa not only needs more scientific research, but it also needs highly skilled graduates to develop the continent” (van Schalkwyk, Blanckenberg, Cloete, Maassen & Mouton, 2021:6). Established research-intensive universities and universities of technologies are under pressure, albeit within different contexts.

The world's problems are not likely to be solved in isolation but through collaboration. These problems impact on universities and it is, in part, the responsibility of researchers to focus on solving them. The following issues or problems are part of the local context and have been identified as ongoing influences in higher education: globalisation and its effects on the South (De Santos, 2014; Subreenduth, 2013); massification (Jansen, 2002; Samuel, 2016); the need for increased productivity and accountability (Ordorika, 2017); commodification of knowledge (Giroux, 2014); the knowledge economy, commercialisation, managerialism and neoliberalism (McKenna, 2018); a crisis of well-being and the possible impending dystopia and even human extinction due to climate change (Batson, 2020). A recent Times Higher Education webinar talks about the Higher Education *industry* (emphasis added)<sup>7</sup>.

Cross and Ndofirepi (2017) state that the bond between research and its production and dissemination in the university in Africa is an important factor for societal change at local, regional and global levels. They argue against investment in and expansion of the current system which mimics European universities. Horsthemke (2017) aligns with them in his injunction to change the criteria of what counts as excellent research or teaching by taking into account diverse conditions and epistemologies. Doctoral supervisors could ensure that prospective doctoral candidates are aware of these debates so as to bring greater criticality, creativity, sense of agency and societal relevance when they choose their research topics.

Not only is diversity a strong feature of supervision but staying up-to-date with the ever-evolving conditions in higher education is essential. Barnett's (2011) *Being a University* refers to the aspect of continually 'becoming'. This is elaborated in Ouma and Kupe's (2020) *Uncertain Times: Re-imagining universities for new, sustainable futures*. Bawa (2018), in *Reimagining the social purpose of universities through engagement*, states that the idea of re-imagination is partly about deciding *how* we want to be in the world and creating a common vision. While some may dismiss this as utopian, it nevertheless urges us to discover the limits of the possible to seek out 'feasible utopias' (Barnett, 2013). This implies that supervisors, too, need to seek synergies with re-imagined higher education and contribute to creating new directions in their postgraduate pedagogy.

#### References:

Barnett, R. (2011). *Being a University*. Abingdon and New York: Routledge.

Barnett, R. (2013). *Imagining the University*. New York: Routledge.

Bawa, A. (2018). Reimagining the social purpose of universities through engagement. In: *Higher Education for Diversity, Social Inclusion and Community: A democratic imperative*, Bergan, S. & Harkavy, I. (Eds.) (pp. 163-176). Series no. 22. Strasbourg: Council of Europe Publishing.

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<sup>7</sup> <https://www.youtube.com/watch?v=i4j6lCwaKlc>



Batson, T. (2020). Universities should lead the fight to preserve humanity. *University World News*. <https://www.universityworldnews.com/post.php?story=20200121142658618>

Bawa, A. (2018). *Reimagining the social purpose of universities through engagement*. Higher Education for Diversity, Social Inclusion and Community: A democratic imperative. Strasbourg: Council of Europe.

Boughey, C., Wels, H. & van den Heuvel, H. (2017). Introduction. In (Eds.) S. McKenna, J. Clarence, J. Fincham, C. Boughey, & H. Wels, *Strengthening Postgraduate Supervision*. Stellenbosch: SUN MeDIA.

Cloete, N., Mouton, J. & Sheppard, C. (2015). *Doctoral Education in South Africa: Policy, Discourse and Data*. Cape Town: African Minds.

Cloete, N. (2020). Universities are a decisive battlefield of our time. *University World News*. Available from: <https://www.universityworldnews.com/post.php?story=20200120064505113%20>

Cross, M. & Ndofirepi, A. (Eds.), (2017). *Knowledge and Change in African Universities*, Sense Publishers.

DHET (2018/2019) Report Pretoria: Department of Higher Education and Training.

De Sousa Santos, B. (2014). *Epistemologies of the South: Justice against epistemicide*. Boulder, USA: Paradigm.

DST, (2002). South African Department of Science and Technology. *South Africa's National Research and Development Strategy*. Pretoria. Available from: <http://www.dst.gov.za/images/pdfs/National%20research%20%20development%20strategy%202002.pdf>

DST, (2008). *South African Department of Science and Technology (DST). Innovation towards a knowledge-based economy: Ten-year innovation plan 2008-2018*. Pretoria: DST. Available from: <http://www.foresightfordevelopment.org/library/55/1373-innovation-towards-a-knowledge-based-economy-ten-year-plan-for-south-africa-2008-2018>

Giroux, H. A. (2014). *Neoliberalism's War on Higher Education*. Chicago: Haymarket.

Herman, C. (2014). 'The South African Doctorate: where to now?' In E. Bitzer, R. Albertyn, L. Frick, B. Grant & F. Kelly (Eds.), *Pushing the Boundaries in Postgraduate Supervision*. Stellenbosch: SUN MeDIA.

Horsthemke, K. (2017). 'Africanisation and Diverse Epistemologies in Higher Education Discourses: Limitations and Possibilities. In M. Cross & A. Ndofirepi (Eds.), *Knowledge and Change in African Universities* (pp 101- 120): Sense Publishers.

Jansen, J. D. (2002). Mode 2 knowledge and institutional life: Taking Gibbons on a walk through a South African university. *Higher Education*, 43(4): 507-521.

Kupe, T. (2021). Reimagining universities for transdisciplinary knowledge co-creation. Online conference. The Southern African Impact Forum. 9-10 March 2021.

Manyike, T.V. (2017). Postgraduate supervision at an open distance e-learning institution in South Africa. *South African Journal of Education*, 37(2).

McKenna, S. (2018). Here are five signs that universities are turning into corporations. *The Conversation*, 13 March. Available from: <https://theconversation.com/here-are-five-signs-that-universities-are-turning-into-corporations>.

Mouton, J., James, M. & Boshoff, N. (2015). *South African Journal of Higher*, 29 (2) (pp 1-22).

Mouton, J., Basson, I., Treptow, R., Blanckenberg, J., Van Lill, M. & Boshoff, N. (2019). *The state of the South African research enterprise*. Stellenbosch: SciSTIP & CREST, Stellenbosch University. Available from: <http://www0.sun.ac.za/scistip/wp-content/uploads/2019/08/state-of-the-South-African-research-enterprise.pdf>.

Mouton, J., van Lill, M., Botha, J., Boshoff, N., Valentine, A., Cloete, N. & Sheppard, C. (2015). *A study on the retention, completion and progress rates of South African postgraduate students*. Department of Science & Technology.

Morozov, A. & Guerin, C. (2021). Academic mobility in the digital academy: Questions for supervision. In P. Rule (Ed.), *The Global Scholar: Implications for Postgraduate Studies and Supervision*. Stellenbosch: SUN MeDIA.

National Planning Commission (2011). *National Development Plan: Vision for 2030*. Pretoria, South Africa: National Planning Commission.

Ouma, G. W. & Kupe, T. (2020). *Uncertain Times: Re-imagining universities for new, sustainable futures*. Pretoria: USAf.

Rensburg, I. (2017). Reinventing Greatness: Responding to Urgent Global-Level Responsibilities and Critical University-Level Priorities. In Cross, M. & Ndofirepi, A. (Eds.), *Knowledge and Change in African Universities*, Sense Publishers. (pp15-28).

Rensburg, I., Motala, S. & David, S.A. (2015). Internationalization of Higher Education: A South African Perspective. *Front. Education China* 10 (pp 91–109).

Subreenduth, S. (2013). Theorizing social justice ambiguities in an era of neoliberalism: The case of post-apartheid South Africa. *Educational Theory* 63(6) (581-600).

Van Schalkwyk, S., Mouton, J., Redelinghuys, H., & McKenna, S. (2020). A systematic analysis of doctoral publication trends. *South Africa Journal of Science* 116(7/8), <https://doi.org/10.17159/sajs.2020/7926>

Van Schalkwyk, S., Blanckenberg, J., Cloete, N., Maassen, P. & Mouton, J. (2021). *Science output up, but data-driven investment needed* (14 January, 2021) <https://www.universityworldnews.com/post.php?story=20210112144237619>

Wingfield B. (2012). How much time does it take to supervise a PhD student? *South African Journal of Science* 108 (11/12), Art. #1454.

### **3. Social Justice; Decolonisation; Equity**

*The evolution of South African universities continues to be shaped by both apartheid and more recent post-apartheid policies. Yet the South African university system is mainly an elite, low participation and high attrition system, offering a medium quality education. Moreover, there is uneven attention to the opportunities that internationalization might bring to South Africa. (Rensburg, Motala & David: 2015)*

In the first part of this section, we see how over decades the calls to be free of colonisation persist in the literature nationally and across the continent. For researchers and supervisors, the continued need to engage in this debate is surely obvious. We are yet to transform supervision models, pedagogy, language and the often taken-for-granted research approaches and methodologies. African scholars do not call for the eradication of Western knowledge (Mbembe, 2016; Jansen, 2019). However, there are research fields and contexts where indigenous knowledges and methodologies would be appropriate and where awareness and disruption of colonising structures, practices and pedagogies are long overdue.

Intellectual elders such as Fanon (1961) gave psychological perspectives of the dehumanising effects of colonisation. Ngugi wa Thiong'o (1986) in *Decolonising the Mind* pointed to the internal recasting of values, identities and knowledges and the violence of the erasure of cultural wisdom. He emphasised the correcting of histories and the essential role of reclaiming language. The colonisers imposed their own sense of morality, patriarchy, religion and 'superior' knowledge. Mamdani (2019) gives a detailed account of the seminal arguments of scholars, such as Mazrui in Uganda and Rodney in Tanzania, who were writing in the 1960s and 1970s. Rodney's poignant book title *How Europe underdeveloped Africa* (1972) reminds us of a long scholarly critique from intellectual activists over the past six decades. Students have often been at the forefront of resisting the persistent epistemic violence. It seems, however, that the supervision and doctoral space, perhaps because the PhD is a degree in a specialised aspect of a discipline, often escapes the focus on decolonising supervisory practice, interactions and research frameworks. There are some recent exceptions: for example, the extensive work of Manathunga (2010; 2013; 2014; 2017; 2018; 2020) in New Zealand and South Africa.

Many seminal works were written before the political dismantling of apartheid in South Africa in 1994 yet the debates continue: for curriculum, language and institutional reform. Mbembe (2015) explains how marginalising not only African knowledge but Africans persists through the origins of the modern university in Africa as an off-shoot of Eurocentric universalism; and predicts (2016) that future African universities will be multilingual. The new age of the Anthropocene calls for a paradigm of "radical sharing and universal inclusion" (Mamdani, 2015:28).

The continued focus of writers on the knowledge aspect of oppression continues through a long line of scholars but students are still asking “Who is entitled to participate in what?” as they experience the discontent of losing their sense of belonging.

The process of colonisation did not stop at a specific point in history. Brocke-Utne (2002) talks of the ‘recolonisation’ and Mignolo (2000) and Maldonado-Torres (2007) of the ‘coloniality of being’. Coloniality refers to the continuity of colonial forms of domination after the end of colonial administration (Grosfoguel, 2013; Maldonado-Torres, 2007).

The depth of the ravaging Western political and economic structures extends into all realms and across time. The hegemony of Western science, in particular, has closed down the possibilities of reflecting on alternative ways of knowing and other ontological perspectives. While acknowledging the liberalising effects of Western education in Africa, Mazrui (1978) claims that it has caused intellectual dependence. This he defines as an excessive reliance on an alien reference-group for ideas and analytical guidelines. This is alarmingly reminiscent of Biko’s statements over 40 years ago: “the black man in himself has developed a certain state of alienation, he rejects himself, precisely because he attaches the meaning white to all that is good, in other words he associates good and he equates good with white” (Biko, 1978: 100). Mamdani brings the accusation to the modern university which perpetuates the Western, “singular notion of the human” (Mamdani, 2016: 68).

The context of continued coloniality often shapes supervision practices and the kind of knowledge that doctoral candidates engage with and contribute to. Reliance on traditional, imported conventions is largely taken for granted at doctoral level. Some recent changes include having theses written in African languages (examples: Kapa, 2019<sup>8</sup>; Gumbi, 2018). There are also increasingly innovative, collaborative PhD structures and pedagogies; these are discussed below. There are, of course, numerous studies on aspects of indigenous knowledge and integration into curricula (Ogunniyi, 2004; Seehawer, 2016; Khupe, 2014; Mpofu, 2016). All provide motives for freeing our attachment to ‘one kind of knowledge’, ‘one right answer’ and ‘one worldview.’

Morrow (2009) points out that ensuring wider physical access to education is insufficient to ensure social justice. What is needed is to ensure ‘epistemological access’: that is, “learning how to become a successful participant in an academic practice” (2009: 78). The framing of transformation has included cognitive justice and epistemic justice (Visvanathan, 2009; Mbembe, 2016; Ndlovu-Gatsheni, 2019). Cognitive justice recognises the right of different forms of knowledge to exist but also the active promotion of diversity of knowledges. Cognitive justice can also be related to how knowledge is shared, used and legitimised (Davies, 2016) and how postgraduate studies provide for the authentic inclusion of working class and Black students not only in Africa but globally. Manathunga (2014) recommends rethinking the relevance and cultural appropriateness of doctoral pedagogies especially for African students abroad. Researchers collaborating from South Africa, New Zealand and Australia suggest that supervision should have a ‘Southern positioning’ rather than adopting

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<sup>8</sup> <https://thisisafrica.me/african-identities/nompumelelo-kapa-isixhosa-phd-thesis-fort-hare/>

practices from the global West and North (Doyle, Manathunga & Prinsen, 2018; Grant & Manathunga, 2011).

Odora Hoppers has made significant contributions to the debates on education and indigenous knowledge (Odora Hoppers, 2001a; 2001b; 2002). She argues that the teaching of Western science in African schools has the deliberate political agenda of rewarding mimicry, passivity and assimilation. Kuiper states that the problems of rote-learning and passive acceptance of power relationships and curricula rest largely on pedagogy (Kuiper, 1998). Odora Hoppers (2001b) sees as negative influences on African education not only the process and legacy of colonisation but also the current process of globalisation. She claims that globalisation inculcates and is driven by individualism, indifference to others and competitiveness. Such trends should not go unexamined in the design of education policy and curriculum, particularly at postgraduate level where it may be in order to write about “epistemic disobedience” but, to ensure that they achieve their PhDs, students may decide to comply with established knowledge practices and traditions. Mignolo’s sharp perception of causes and systems leads him to say about the current context, “The crooked rhetoric that naturalizes ‘modernity’ as a universal global process and point of arrival hides its darker side, the constant reproduction of ‘coloniality’” (Mignolo, 2007:450).

Odora Hoppers (2014) refers to this as a crisis of the academy. Fataar and Subreenduth (2015) urge a rethink of worldview and practice, of ways in which disciplinary knowledge is organised and developed, and ontologies, epistemologies rethought to become truly representative of Africa. Maybe we need to consider the question posed by Bawa (2018): “To what extent are our Higher Education institutions South African universities?”

One may imagine that once one’s education has reached doctoral level and is free of a set curriculum that there would be a greater degree of autonomy, academic freedom and individual pursuit of knowledges and that supervisors and examiners would welcome the pushing of boundaries in disciplines. There is little evidence that this is the case. Recently, Avalos (2021) has argued that our way of knowing and being *only superficially benefits the empowered few*. This challenge goes to the heart of how universities conceive of their core purpose in the world. Against this background, supervisors should base their interactions with students on an understanding of the student and her or his context. Research also needs to develop methods that align with participants’ contexts and cultural values (Seehawer, 2018; Khupe & Keane, 2017; Goduka, Madolo, Rozani, Notsi & Talen, 2013). Many African universities are teaching obsolete forms of knowledge with obsolete pedagogies (Mbembe, 2015). However, Louw (2019) cautions that strong anti-Western sentiments can lead to the repudiation of all Western knowledge. A knowledge democracy should recognise multiple epistemologies (Hall & Tandon, 2017).

A great resource lies in alternative ways of seeing and understanding the world and our place in it. Finding ways of drawing on and integrating indigenous ways of being in nature and with each other may be the most valuable approach to solving some of our persistent dilemmas, decolonised in our thinking and becoming more holistic in our understandings (Keane, 2013). The creation of new knowledge through doctoral research in Africa should take into account

diverse worldviews, knowledge traditions, knowledge holders and communities' needs as well as a consideration of who benefits from the knowledge creation.

## References

Avalos, N. (2021). *Divesting the Mind of Colonialism: Land-Based Ethics and Settler Solidarity in a Time of Corona and Revolution*. One Earth Sangha. February 19, 2021. <https://oneearthsangha.org/articles/divesting-the-mind-of-colonialism/> (Accessed 20 March 2021)

Grant, B. & Manathunga, C. (2011). Supervision and cultural difference: Rethinking institutional pedagogies. *Innovations in Education and Teaching International*, 48 (4): 351-354.

Brocke-Utne, B. (2002). *Whose Education for All? The Recolonization of the African Mind*. New York & London: Falmer Press.

Chilisa, B. (2012). *Indigenous research methodologies*. London, UK: SAGE.

Davies, C. J. (2016). *Whose Knowledge Counts? Exploring Cognitive Justice in Community-University Collaborations*, PhD Thesis. University of Brighton.

de Sousa Santos, B. (2014). *Epistemologies of the South: Justice against epistemicide*. Boulder, USA: Paradigm.

de Sousa Santos, B. (2007). Beyond abyssal thinking: From global lines to ecologies of knowledge. *Eurozine*, (33): 45-89.

Fanon, F. (1961). *The wretched of the earth*. New York, USA: Grove Press.

Fataar, A. & Subreenduth, S. (2015). The search for ecologies of knowledge in the encounter with African epistemicide in South African education. *South African Journal of Higher Education*, 29(2): 106-121. doi: 10.20853/29-2-468.

Goduka, N., Madolo, Y., Rozani, C., Notsi, L. & Talen, V. (2013). Creating spaces for eZiko Sipheka Sisophula theoretical framework for teaching and researching in higher education: A philosophical exposition. *Indilinga: African Journal of Indigenous Knowledge Systems*, 12(1): 1–12.

Grosfoguel, R. (2013). The structure of knowledge in Westernized universities: Epistemic racism/sexism and the four genocides/epistemicides of the long 16th century. *Human Architecture: Journal of the Sociology of Self-Knowledge*, 11(1): 73-90. <http://scholarworks.umb.edu/humanarchitecture/vol11/iss1/8/>

Gumbi, P. (2018). On the Inconspicuousness of Indigenous African Languages: The Case of IsiZulu Linguistic Integration in KwaZulu-Natal's Basic Education Sector. *Journal of Linguistics and Education Research*, 1 (1): 31-38.

Hall, B.L. & Tandon, R. (2017). Decolonization of knowledge, epistemicide, participatory research and higher education. *Research for All*, 1(1): 6-19. DOI 10.18546/RFA.01.1.02.

- Jansen, J. D. (2019). 'Making sense of Decolonisation in Universities.' In J. D. Jansen (Ed.) *Decolonisation in Universities: The politics of knowledge*. Johannesburg: Wits University Press: 1-12.
- Keane, M. (2013). 'Indigenous Methodologies for Indigenous Knowledge Research.' Fourth International Conference of the Science & Indigenous Knowledge Systems Project. October 29-31, 2013. University of the Western Cape: 130-139.
- Keane, M. Khupe, C. & Seehawer, M. (2017). Decolonising research: Who benefits from Indigenous Knowledge Research? *Educational Research for Social Change*. 6(1): 12-24.
- Khupe, C. (2014). *Indigenous knowledge and school science: Possibilities for integration* Doctoral dissertation, University of the Witwatersrand, Johannesburg, <http://wiredspace.wits.ac.za/handle/10539/15109>
- Khupe, C. & Keane, M. (2017). Towards an African education research methodology: Decolonising new knowledge. *Educational Research for Social Change*. 6(1): 25-37.
- Knowles, C. (2015). Losing my religion: reflections on the decolonisation of knowledge in the Strengthening Postgraduate Supervision course. [https://www.academia.edu/15672175/Reflections\\_on\\_the\\_decolonisation\\_of\\_knowledge\\_in\\_the\\_Strengthening\\_Postgraduate\\_Supervision\\_course](https://www.academia.edu/15672175/Reflections_on_the_decolonisation_of_knowledge_in_the_Strengthening_Postgraduate_Supervision_course)
- Kuiper, J. (1998). Science and culture: the art of balancing. *Journal of South African Association of Research in Mathematics and Science Education*, 2(1): 21-32.
- Lebakeng, J.T. Phalane, M.M. & Dalindjebo, N. (2006). Epistemicide, institutional cultures and the imperative for the Africanisation of universities in South Africa. *Alternation*, 13(1): 70-87.
- Louw, A. (2019). Decolonisation and cognitive justice imperatives in health sciences related research supervision. *African Journal of Health Professions Education*, 11(3): 72-73. <https://doi.org/10.7196/AJHPE.2019>
- Malcolm, C. (Ed.) (2004). *Human Rights, Democracy, and Social Justice: Science and Mathematics Literacy in Disadvantaged Communities*. CEREP, University of KwaZulu-Natal.
- Maldonado-Torres, N. (2007). On the coloniality of being. *Cultural Studies*, 21(2-3): 240-270. DOI: 10.1080/09502380601162548
- Mamdani, M. (2016). Between the public intellectual and the scholar: decolonization and some post-independence initiatives in African higher education. *Inter-Asia Cultural Studies*, 17(1): 68-83, DOI: 10.1080/14649373.2016.1140260
- Mamdani, M. (2016). Between the public intellectual and the scholar: decolonization and some post-independence initiatives in African higher education. *Inter-Asia Cultural Studies*, 17(1): 68-83.

- Manathunga, C. (2010). Critical transcultural exchanges: Educational development for supervisors. In M. Walker & P. Thompson (Eds.), *Routledge doctoral supervisor's companion: Supporting effective research in education and the social studies*: 76-87). London: Routledge.
- Manathunga, C. (2013). Culture as a place of thought. In T. Engels-Schwarzpaul & M. Peters (Eds.) *Of other thoughts: non-traditional approaches to the doctorate*: 67-82. Rotterdam: Sense Publishers.
- Manathunga, C. (2014). *Intercultural Postgraduate Supervision. Reimagining Time, Place and Knowledge* (1st edition). Abingdon: Routledge.
- Manathunga, C. (2018). Decolonising the curriculum: Southern interrogations of time, place and knowledge. *SoTL in the South*, 2(1): 95-111.
- Manathunga, C. (2020). Decolonising higher education: creating space for Southern knowledge systems. *SOTL in the South*, 4(1): 4-25. <https://doi.org/10.36615/sotls.v4i1.138>
- Maringe, F. (2017). Transforming teaching and learning in higher education. In Cross, M. and Ndofirepi, A. (Eds) *Knowledge and Change in South African Universities, 2 Reimagining the Terrain*: 1-18.
- Mazrui, A. A. (1978). *Political values and the educated class in Africa*. Berkeley and Los Angeles. University of California Press
- Mazrui, A. A. (2002). Neo-dependency and Africa's fragmentation. In P. H. Coetzee & A. P. J. Roux (Eds.) *Philosophy from Africa* (2<sup>nd</sup> edition) 2002. London: Oxford University Press: 528-542.
- Mbembe, A. J. (2016). Decolonizing the university: New directions. *Arts and Humanities in Higher education*. 15(1): 29-45.
- Mbembe, A. J. (2015). Decolonizing knowledge and the question of the archive. <https://wiser.wits.ac.za/system/files/Achille%20Mbembe%20%20Decolonizing%20Knowledge%20and%20the%20Question%20of%20the%20Archive.pdf>
- Mignolo, W. (2000). *Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking*. Princeton, NJ: Princeton University Press.
- Mignolo, W. (2007). Delinking: The Rhetoric of Modernity, the Logic of Coloniality and the Grammar of De-coloniality, *Cultural Studies* 21(2): 449-514.
- Mpofu, V. (2016). Possibilities of integrating indigenous knowledge into classroom science: The case of plant healing (Doctoral dissertation, University of the Witwatersrand, South Africa).
- Ndlovu-Gatsheni, N.J. (2019). Provisional notes on Decolonising Methodology and Undoing its Dirty History. *Journal of Developing Societies*. 35(4): 481-492.



Ndofirepi, A.P. & Cross, M. (2014). Transforming epistemologies in the postcolonial African university? The challenge of the politics of knowledge. *Journal of Educational Learning*, 8(4): 291-298.

Ngugi wa Thiong'o (1986). *Decolonizing the Mind: The politics of language in African literature*. Nairobi, Heinemann.

Nzimande, B. S. & Mathieson, S. (2000). Educational Transformation in South Africa's Transition to Democracy. In T. Mebrahtu, M. Crossley & D. Johnson (Eds.). *Globalisation, Educational Transformation and Societies in transition*. Oxford: Symposium Books.

Nzimande, B.S. (2012). Decolonizing research in post-apartheid South Africa: The politics of methodology. *Qualitative Inquiry*, 18(3): 215-226.

Odora Hoppers, C. A. (2001a). Indigenous Knowledge systems and academic institutions in South Africa. *Perspectives in Education*, 19 (1): 73-85.

Odora Hoppers, C. A. (2001b). Structural Violence as a Constraint to African Policy Formation in the 1990s Repositioning Education in International Relations. *Institute of International Education*. Stockholm University.

Odora Hoppers, C. A. (2002) (Ed.), *Indigenous Knowledge and the Integration of Knowledge Systems*. Claremont, New Africa Books.

Odora Hoppers, C. A. (2008). Renegotiating Agency in Knowledge Production, Innovation and Africa's Development in the Context of the Triage Society. International Symposium on knowledge and transformation: social and human sciences in Africa, Cape Town.

Ogunniyi, M. B. (2004). The Challenge of preparing and equipping science teachers in higher education to integrate scientific and indigenous knowledge systems for learners. *South African Journal of Higher Education*. 18 (3): 289-304.

Olonisakin, F. (2020). Universities can and should do much more to address systemic racism. *Times Higher Education*. June 2020.  
<https://www.timeshighereducation.com/opinion/universities-can-and-should-do-much-more-address-systemic-racism>

Ordorika, I. (2017). Foreword: Knowledge and Change in Contemporary Postcolonial Universities in (Eds.) M. Cross & A. Ndofirepi, A. *Knowledge and Change in African Universities*, Sense Publishers: vii-xvii.

Roddick, A. (2001). *Take it Personally: How globalisation affects you and powerful ways to challenge it*. London, Thorsons.

Seehawer, M. (2016). How can South African science teachers integrate indigenous knowledges into their teaching? A lesson learnt from Eastern Cape teachers who did it - and a call for action for teacher educators. In F. Otulaja, K. R. Langenhoven, M. Cherinda & E. Nhalevilo (Eds.), *Promoting IKS for continental cooperation and socioeconomic development*: 64-70. Johannesburg, African Association for the Study of Indigenous Knowledge Systems.

Seehawer, M.K. (2018). Decolonising research in a Sub-Saharan African context: exploring Ubuntu as a foundation for research methodology, ethics and agenda. *International Journal of Social Research Methodology* (21,4): 453-466, DOI: 10.1080/13645579.2018.1432404

Visvanathan, S. (2009). The search for cognitive justice. Seminar presented May 2009. Available at <http://www.india-seminar.com/2009/597/597shivvisvanathan.htm>

Watson, K. (2000). Globalisation, Educational Reform and Language Policy in Transitional Societies. In T. Mebrahtu, M. Crossley & D. Johnson, (Eds.), *Globalisation, Educational Transformation and Societies in transition*. Oxford: Symposium Books.

Backhouse (2005, 2011) identified three doctoral discourses in South Africa, each with a distinct purpose: the 'scholarly discourse', the 'labour market discourse' and the 'on-going personal development discourse'. Each has its own assumptions about the purpose of doctoral education, the people who undertake doctoral study and the implications for policy and practice. As he notes, two of the discourses are familiar while the third is an emerging discourse that he identified in the course of doctoral research at three South African universities.

### **The traditional or scholarly view of the PhD**

"The PhD," wrote Heathcott (2005, in Badenhorst 2008:18), "is a research degree, a marker of significant intellectual accomplishment, and a mode of knowledge production". PhD students have to undertake original research, develop conceptual frameworks, design appropriate methods of study and contribute to the body of knowledge of a discipline or field. The goal of the PhD is to produce a body of work worthy of the degree.

Candidates need to be competent in disciplinary knowledge, ethical conduct and professional responsibility and must demonstrate research and communicative ability (Heathcott, 2005 in Badenhorst, 2008). A PhD is tied to academic identity and remains the most common, and highly regarded, doctoral degree among academic staff of universities in South Africa. Finally, a PhD is about developing intellectual rigour and commitment, developing skills and directing energies (Badenhorst, 2008:19).

Knowledge creation is an unconditional expectation of a doctoral thesis and the question that examiners have to answer is, "Has the candidate made an original contribution to knowledge?" Other expected outcomes of the PhD include expertise and critical knowledge in an area at the forefront of a field; the ability to contribute to scholarly debates around theories of knowledge; develop and design new methods; address complex ethical, practical and theoretical problems; access, process and manage information; communicate information independently; design, sustain and manage change; and intellectual independence and accountability (SAQA, 2012). The Vitae Researcher Development Framework (RDF) outlines four domains for researcher development (knowledge and intellectual abilities; personal effectiveness; research governance and organisation; and engagement, influence and impact) and twelve sub-domains (Vitae 2010). The extent to which this framework is relevant to South Africa is debatable (Lamberti & Keane, 2021).

Making a knowledge contribution through a thesis does not automatically mean that the research has wide circulation. As Kamler (2008) points out, if the work is not published the only likely readers will be the supervisor and examiners.

Following its transition to democracy in 1994, South Africa aspired to become a player in the world economy. The elite universities that produced the most PhDs came under scrutiny for being the preserve of (mainly) privileged white men. Surprisingly, most PhDs until then had been awarded in the social sciences and humanities, with relatively low numbers in engineering and science (Herman, 2012).

When the academic boycott of South African universities ended in 1990, the ANC-led government began to engage with 'internationalisation' of South African universities and set new equity targets to expand the pool of black doctoral students from South Africa and the rest of the SADC region (Herman, 2012). These measures were undertaken as part a drive to expand and support universities to deliver a larger number of graduates who could contribute to the 'knowledge economy'. The Department of Science and Technology (DST, 2008) envisaged a five-fold increase in the number of PhD graduates in the span of a decade in order to grow the knowledge economy in the global arena. To support the initiative, the DST, through ASSAf<sup>9</sup> (Academy of Science South Africa) proposed the creation of research chairs and centres of excellence and sending academics and postgraduate students to study with international partner institutions in Africa and abroad. However, the National Research Foundation (NRF) was unable to fund such initiatives. A more manageable, interim step was taken to review policies related to the PhD and to improve the capacity and qualifications of academic staff to supervise high level postgraduate research.

### **The labour market discourse**

At about the same time as government departments were contemplating how best to expand or redirect the higher education system, some politicians, business leaders and university managers in South Africa began to promote the idea of developing a professional doctorate to replace or supplement the PhD.

In the 'labour market discourse', Backhouse (2011:32) argues, "the focus of doctoral education becomes training in research and other transferable skills, while the knowledge produced takes second place". The interest of stakeholders is not in personal scholarly development or advancing 'pure' models of research but in increasing the number of postgraduates in science and technology to support a competitive knowledge-based economy. This discourse can be found in government policy documents which focus on increasing the number of postgraduates and speeding up the process of educating them to address a human resources problem (Backhouse, 2011).

South Africa produces too few doctoral graduates annually relative to the size of its population (Herman, 2012). One of the instruments for supplying the expanded human resources needed for the knowledge economy were the new Universities of Technology

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<sup>9</sup> <https://www.assaf.org.za/>

which, it was thought, could provide a degree of quality control over the adaptation of curriculum models of the professional doctorate that had been introduced in the UK, Europe, and in Canada, the USA, Australia and New Zealand in the 1990s.

In the professional doctorate in the UK, Europe and in Canada, the USA, Australia and New Zealand, applied research is often conducted in the workplace in teams made up of employees, professional researchers, managers and the academic supervisor. Academic staff may provide only initial formal education and training in research while later being involved in certifying the quality of the degree and graduating students. Policy planners in South Africa initially proposed that Masters degree graduates study for a professional doctorate through Universities of Technology where they would conduct research oriented around a need for applied research identified by industry and commerce partners, with benefits accruing also to state-owned enterprises (Backhouse, 2011). However, according to Herman (2012), the proposed South African model for the professional doctorate attracts mature students in mid-career, often white men in their 30s, and offers fast-track doctoral research through the introduction of coursework alongside the development of relevant professional knowledge.

Professional doctorates aim to equip people with the knowledge and skills to be influential leaders within a particular industry or employment setting. In South Africa, the original DST/NRF vision was to create more PhDs in science and technology but PhDs came to be perceived to take too long and to be too costly. Efforts to fast-track students through the PhD proved ineffective.

Backhouse (2011: 33) points out that “research careers require skills in sourcing funding, working in teams, managing projects and interacting with stakeholders, while careers in industry or the public sector require graduates to learn how to sell themselves in a competitive labour market”. While the quality of graduates educated in the scholarly discourse of the doctorate is governed by institutional structures and reputations, in essence the quality of graduates educated in the labour market discourse is governed by market forces and other quality assurance mechanisms (Backhouse, 2011). Some academics, such as Mouton et al. (2015), point out that doctoral education is now more about making profit for the university, the candidate and the country than it is about developing new knowledge.

### **The ongoing personal and professional discourse**

Backhouse (2011: 33) describes this discourse as “somewhere between revealing an independent scholar and training a skilled human resource ... that of developing a critical intellectual”. This discourse is about the process of reading the world and the word in a new way, resulting in “deeper and more extensive or intricate understandings.” Doctoral learning in this discourse goes beyond research or skills training to encompass more holistic development of the person. Metaphors of journeys abound in this discourse.

Backhouse points out that in South Africa, people who enrol for PhDs are “seldom starting out in their careers ... they come from established careers in medicine, agriculture, education and science.” The desire to undertake a PhD could be a further step in a career, or a step

outside a career. The discourse acknowledges different personal values, interests and histories of doctoral people and the desire to develop personal, intellectual and professional knowledge. An important aspect of this discourse is that it allows, even celebrates creative engagement with knowledge. It is at odds with the labour market discourse.

PhD supervisors who engage with students who seek personal development note that one of the challenges of supervising highly individual experiences is to construct a curriculum or a programme of study to meet individuals' desire for personal development and growth. A further challenge for some supervisors, and students, could be the length of time to complete the degree, and the need for sensitivity, flexibility and responsiveness to the student's personal and professional development needs or desires. Students and supervisors are also engaging over a period of time and may thus experience changes in context and processes.

Frick, McKenna and Muthamba (2017: 446) warn that when industry influences HE policy, as in Australia, the size and shape of the PhD, as well as its funding and staffing models, are put at risk. South Africa is not yet at this point. The PhD still has traction. Backhouse's scholarly discourse and the discourse of the PhD for personal and professional development provide grounds to believe that the PhD will continue to evolve and that doctoral supervisors will retain the ability to remain "responsible, compassionate and creative scholars".

## References

- Backhouse, J. (2011). Doctoral Discourses in South Africa. *Perspectives in Education*. 29 (3)
- Badenhorst, C. (2008). *Dissertation Writing: A Research Journey*. Pretoria: Van Schaik.
- DST (2008). South African Department of Science and Technology (DST). *Innovation towards a knowledge-based economy: Ten-year innovation plan 2008-2018*. Pretoria: DST. Available from: <http://www.foresightfordevelopment.org/library/55/1373-innovation-towards-a-knowledge-based-economy-ten-year-plan-for-south-africa-2008-2018>
- Frick, L., McKenna, S. and Muthamba, E. (2017). Death of the PhD: When industry partners determine doctoral outcomes. *Higher Education Research and Development*, 36 (2): 444-447).
- Halse, C. and Mowbray, S. (2011). Editorial in a special edition of *Studies in Higher Education*: Theorising the Doctorate. 36 (5): 513-525.
- Heathcott, J. (2005). Trained for Nothing. *Academe*. 91 (6): 14-17.
- Herman, C. (2011). Expanding doctoral education in South Africa: pipeline or pipedream? *Higher Education Research and Development*. 30 (4): 505-517.
- Herman, C. (2012). The Purpose of the PhD- a South African perspective. *Higher Education Policy* 25: 1-18. <https://doi.org/10.1057/hep.2011.14>
- Johnson, L., Lee, A. & Green, B. (2000). The PhD and the autonomous self: gender, rationality and postgraduate pedagogy. *Studies in Higher Education*, 25(2): 135-148.

Kamler, B. (2008). Rethinking doctoral publication practices: Writing from and beyond the thesis. *Studies in Higher Education*, (3):283-4 <https://doi.org/10.1080/03075070802049236>.

Lamberti, P. and Keane, M. 2021. The Vitae Researcher Development Framework in South African Postgraduate Education. Chapter 3 in Rule, P, Bitzer, E. and Frick, E. (Eds) *The Global Scholar: Implications for Postgraduate Studies and Supervision*. Stellenbosch: SUN MeDIA.

Mouton, J., Boshoff, N. & James, M. (2015). *A survey of doctoral supervisors in South Africa*. <https://doi.org/10.20853/29-2-467>

South African Qualifications Authority (2012). *Level Descriptors for the South African National Qualifications Framework*.

Vitae researcher development framework report. Retrieved 20 March 2011 from [www.vitae.ac.uk/CMS/files/upload/Vitae-Researcher-Development-Framework.pdf](http://www.vitae.ac.uk/CMS/files/upload/Vitae-Researcher-Development-Framework.pdf).

## **4. Doctoral Degrees and Standard, Economic Impact of the PhD and Student Experiences**

### **Doctoral Degrees and Standard**

The CHE (2018) commissioned standards for doctoral qualifications. Two variants of the doctoral degree were developed: the Doctoral Degree (General) and the Doctoral Degree (Professional).

The Doctoral degree (General) “prepares candidates for an academic career and requires candidates to undertake research culminating in the submission, assessment and acceptance of a thesis” (2018: 6). The defining characteristic of the qualification is that the candidate is required to demonstrate “high level research capability and to make a significant and original contribution at the frontiers of a discipline or field.” The degree requires two years’ full time study, usually after completing a Masters degree. A graduate should be able to supervise and evaluate the research of others in the area of specialisation concerned.

The Doctoral degree (Professional) provides education and training for a career in the professions and/or industry. It is designed around high level performance and innovation in a professional context. Candidates undertake a combination of coursework and advanced research leading to an original thesis or another form of research that is commensurate with the nature of the discipline or field and the specific area of enquiry. Professional doctorates may incorporate forms of work-integrated learning. The defining characteristic of this qualification is that it requires the ability to integrate theory with practice through the application of theoretical knowledge to highly complex problems in a wide range of professional contexts.

The doctoral standard indicates that, in both doctoral degrees, qualifying students need to provide evidence of the following attributes:

## Knowledge

- Broad, well-informed, and current knowledge of field or discipline.
- Expert, specialised and in-depth current knowledge of a specific area of research.
- Insight into the interconnectedness of one's topic of research with other cognate fields.
- Ethical awareness in research and professional conduct.
- An original contribution to the study.

## Skills

- Evaluation, selection and application of appropriate research approaches, methodologies and processes in the pursuit of a research objective.
- Reflection and autonomy.
- Communication skills, including relevant information and digital literacy skills.
- Critical and analytical skills for problem-solving.

### **Tracking the economic impact of research and the doctorate**

Australian academics Halse and Mowbray (2011), like many others, lament that “around the world, government and private organisations are investing considerable time, energy and resources into identifying and tracking the economic impact of research and the doctorate.” While acknowledging the economic imperatives and the intensified pressure on governments, research councils and international agencies to maximise the economic returns from research funding, Halse and Mowbray (2011) draw attention to recent research findings in the UK that show that public and social research organisations bring benefits and returns to the social, environmental, cultural, health and public policy aspects of the economy. They propose that governments and universities should suspend research into the economic benefits of the doctorate and invest more resources in social, health and environmental research. In that way, more useful and perhaps widely applicable outcomes of research will be achieved. They also recommend more public-private partnerships.

### **International Student Experiences**

Herman and Kombe (2019) studied the role of social networks among 23 international doctoral students at one South African university. International students from the SADC community comprised 40% of all doctoral students in South Africa in 2016. Herman and Kombe acknowledged the ample research literature exploring the experiences of such students, including loneliness and isolation, bias and discrimination, stress and culture shock, a feeling of not belonging, and financial pressures. They also noted that the experiences of international doctoral students depend to a degree on the support they encounter in their discipline and department and from individual supervisors.

Herman and Kombe's (2019:9) research underlines the solitary nature of the doctoral journey. Most international students had expected to feel 'at home' in South Africa because it is a 'black country' but instead they felt like foreigners on campus. Nigerians and Zimbabweans reported subtle and overt forms of xenophobia on and off campus. Aside from their academic network, which provided information about conference attendance, funding, research and

other educational matters, most international students developed their own social networks based on their studies, faith, place of residence, music or dance as a 'survival mechanism' while in South Africa. They lacked feelings of belonging and connection with South Africans and tended to cluster according to their nationality or region of origin, for example West or East Africa or SADC. Herman and Kombe noted that international students' experiences in South Africa could hinder their acquisition of language and inter-cultural skills necessary for global citizenship.

## References

Griesel, H. and Parker, B. (2009). *Graduate Attributes. A baseline study on South African graduates from the perspective of employers*. Higher Education South Africa and the South African Qualifications Authority.

Herman, C. (2011a). Obstacles to success - doctoral student attrition in South Africa. *Perspectives in Education*, 29(3): 40-52.

Herman, C. (2011b). Expanding doctoral education in South Africa: Pipeline or pipedream? *Higher Education Research and Development*. 30 (4): 505-517.

Herman, C. and Kombe, M. (2019). The role of social networks in the transitional experiences of international African doctoral students at one university in South Africa. *Higher Education Research and Development*. 38(3): 508-521.

Halse, C. and Mowbray, S. (2011). Editorial. Special edition of *Studies in Higher Education: Theorising the doctorate*. 36(5): 513-525.

McGee, E., White, D.T., Jenkins, A.T., Houston, S., Bentley, L.C., Smith, W.J, & Robinson, W.H. (2016). *Black engineering students' motivation for PhD attainment: passion plus purpose*. Emerald Insight. 10(2): 167-193.

Wadee, A., Keane, M., Dietz, T. & Hay, D. (2010). *Effective PhD Supervision, Mentoring and Coaching*. 2<sup>nd</sup> Edition. South Africa-Netherlands research Programme on Alternatives in Development. Amsterdam: Rosenberg Publishers.

## 5. Professional Development of Doctoral Candidates and Supervisors

### Shifts in thinking about enhancing black students' success in HE: from access to academic development to academic literacies

In a special issue of the *Southern Africa Review of Education* focusing on the relationship between access to public school education and the quality of education attained in response to the Millennium Development Goals, Soudien, Motala and Fataar (2012) argued that, fundamentally, there is a need to recognise that access is more than enrolment and that quality, equity and outcomes need to be addressed together if meaningful access to education is to be achieved.



Academic development (AD) units and academic staff development programmes (ASDPs) were introduced, or reoriented, in many of South Africa's HE institutions soon after 1994, with a primary mission to select, orientate, educate and support black students admitted at undergraduate level. AD and SoTL units were established with two missions in mind. The first was to engage academics in developing new procedures for the selection of black South African and international students who had the potential to succeed in studies at undergraduate and postgraduate levels. The assumption at the time was that if the right students were selected, they would have little or no difficulty in succeeding in HE. Once students were selected, AD units could assist academic staff to support students' learning in their early months or years of study. However, it was not as simple as that.

Vorster and Quinn (2017: 34) draw on Bhaskar's theory of 'the possible' and Archer's theory of social realism to identify cultural systems, beliefs and values which exist independently of whether people are aware of them. One such cultural system is the rate of participation in higher education which, in 2017, stood at 19% of the South African population aged 18-24 years. Then and now, in 2021, the majority of students entering universities is black; however, black students fail and drop out of the system at far higher rates than white students. Vorster and Quinn (2017: 37) describe this as "a bleak picture of low access and low success".

Until 2000, most academic staff in South African universities were white and taught from a Western tradition. They experienced university spaces as "generally congruent with their epistemological values, beliefs and practices (Vorster & Quinn, 2017: 36). Until recently, with the advent of widespread, violent student protest action over rising fees (Fees Must Fall) and colonisation of the curriculum (Rhodes Must Fall) many academics did not feel the need to change the structural and cultural conditions that prevail in South African universities. As several black academic staff from the SADC region remarked during a discussion of the student protests on campus in 2016, "It is difficult to see how the Engineering curriculum can be decolonised".

Aside from investing in better selection systems for undergraduate students, an important initiative for AD practitioners and some mainstream academics was to facilitate the development of extended degree programmes. These programmes were designed to help mainly black students to bridge the gap between school and university and prepare them for success in the mainstream curriculum over a period of four years rather than three. However, according to Vorster & Quinn (2017: 37) these programmes had a ghettoising effect. Students were forced to assimilate to the ways of the university, and the ways of being and doing at the university were not questioned sufficiently by students, academics, or university managers, even as protest action began. Vorster and Quinn charge that universities "have been using a discourse of transformation, but not engaging in significant structural and cultural changes beyond changing staff and student demographics (Vorster & Quinn, 2017: 37).

The AD centres and SoTL units that were instrumental in developing better selection procedures and extended degree programmes to enable black students to succeed in HE also provided academic and social support to students and staff in the form of teaching,

curriculum development, counselling, mentoring and coaching. However, they were also tasked with evaluating lecturers' performance as university teachers, as a means of quality control. Lecturers might be rewarded for good performance in the classroom or censured for poor performance. This 'mission-creep' in AD practitioners' roles may have contributed to both confusion and resentment about the purpose of AD practitioners and units in higher education.

Leibowitz and Bozalek (2016) point out that SoTL, and other forms of academic development, involve both academics and students in a degree of reflection, research or scholarship. They charge that SoTL or AD may have succeeded, in some institutions, in encouraging academics to engage with professional learning but generally failed to take up bigger questions of social justice and equality in the education of black students.

Leibowitz and Bozalek (2012: 2) point out that "Many black students and academics do not feel at 'home' in higher education institutions in South Africa. They bring into the teaching and learning space memories of oppression and oppressive thinking typical of the apartheid era (2016: 3). They may experience three forms of social injustice at university:

- Matters of ethnicity and identity (recognition of difference)
- Matters of distribution of material and cultural resources
- Matters of power and voice, and thus of framing.

Participation and success in university are impeded by the scale of social injustice described above.

## **6. Literacy Practices**

In a study of the intersection between academic literacies and student identities at a university of technology, McKenna (2004: 269) noted that students who entered a higher education institution were "clearly invested in adopting the practices necessary for membership in new social groups in the higher education environment, but they did not, in general, identify with the academic literacy practices that perform a gatekeeping function for success in higher education." These literacy practices were perceived by the students as being confusing, difficult to access and, at times, alienating from the African identities they valued.

In a study conducted in the USA, Heath (1983) showed that students from middle class backgrounds were more inclined than those from working class backgrounds to interact with texts similar to those used in school. Gee (1990, in McKenna, 2004: 274) noted that new discourses can be mastered by 'enculturation', or a form of apprenticeship, that requires scaffolded interaction with people who have already mastered the discourse. Postgraduate supervisors and AD practitioners are often tasked, with no specific preparation, with developing these disciplinary and institutional discourses in local and international students at undergraduate and postgraduate levels.

McKenna (ibid) points out that the dominance of western literacy practices in South African institutions of higher education may mean that some black, rural and working class students

do not have easy access to the linguistic codes and practices of the academic disciplines and communities they encounter. The ways of knowing that stem from students' identities or literacy practices outside the classroom are not often valued in the university classroom. Students who feel alienated from 'what is going on here' may then disengage from learning.

Boughey and McKenna (2016: 4) assert that, "An individual whose home discourse is very different from those of the academy will encounter academic discourses as alien and even incomprehensible". Some practices are subtle and normalised in the university but are barely present in their home communities. Academic literacy practices, or 'ways of being in academic contexts,' may be experienced as alienating and even colonial.

One way for students entering university to gain knowledge of the specific literacy practices required in their discipline(s) is from other students who hail from their home communities and who have substantively mastered the literacy practices needed for success. Others may be fortunate to gain access to an academic developer who is familiar with discourse and literacy practices in students' home communities and can help them to identify and develop further practices required at university. As McKenna (2004: 277) states, "There is a need to analyse what practices are expected of our students in order for them to succeed in our disciplines. In engaging in such reflective practice we should become aware of the subtle ways in which such practices act as gatekeeping mechanisms."

While some academic developers may be experienced in helping students to develop necessary disciplinary and university literacy practices over time, many are daunted by the sheer scale of black students' sense of institutional alienation, difficulty in adjusting to the university environment, financial hardships and poverty on campus. As Kerr and Luescher remark (2018: 216), "With few exceptions ... university life is a source of anxiety and struggle for students -- and a highly racialised one at that." It appears that many academic developers may spend more time referring students to social and psychological services on and off campus than they spend on traditional AD activities such as language and writing development.

## References

Boughey, C. and McKenna, S. 2016. Academic literacy and the decontextualized learner. *Critical Studies in Teaching and Learning*, 4(2):1-9.

Fraser, N. 2008. 'Reframing Justice in a Globalising World.' In *Adding Insult to Injury: Nancy Fraser Debates her Critics*, K. Olsen (Ed.), 273-291. London: Verso.

Fraser, N. 2009. *Scales of Justice: Reimagining Political Space in a Globalizing World*. New York: Columbia University Press.

Gee, J. 1990. *Social linguistics and literacies: Ideology in discourse*. London: Falmer.

Lee, A. 2018. How can we develop supervisors for the modern doctorate? *Studies in Higher Education*, 43:5, 878-890, DOI: 10.1080/03075079.2018.1438116

Leibowitz, B. and Bozalek, V. 2016. The Scholarship of teaching and learning from a social justice perspective. *Teaching in Higher Education*, 21(2): 109-122.

McKenna, S. 2004. The intersection between academic literacies and student identities. *South African Journal of Higher Education*, 18(3): 692-280.

Kerr, P. and Luescher, T. 2018. Students' experiences of university life beyond the curriculum. Chapter 16 in P. Ashwin and J.M. Case (Eds) *Higher Education Pathways. South African Undergraduate Education and the Public Good*. Cape Town: African Minds.

Pitso, T. 2003. *South African Journal of Higher Education*. 27(1): 196-208.

Vorster, J. and Quinn, L. 2017. The "Decolonial Turn": What does it mean for academic staff development? *Education as Change*, 21(1): 31-49.

## **7. Gender and the Leaky Postgraduate Pipeline**

In 2015, Prof Johann Mouton of Stellenbosch University presented data on the low progression and retention rates of postgraduate students in South Africa at a forum hosted by the Teaching and Learning Office of the University of KwaZulu-Natal (UKZN). He announced that a huge growth in doctoral enrolments had taken place between 2008 and 2012 when the Department of Higher Education and Training introduced funding incentives. The natural sciences had benefitted the most, growing from 26% of all doctoral enrolments in 1996 to 36% in 2012. Further good news was that, on average, 16% of masters graduates continued to enrol for a PhD within five years of completing their Masters studies.

Mouton noted that low progression and retention rates were due mainly to the part-time nature of most postgraduate studies. A full 70% of postgraduate students in South Africa studied part time in 2015. Progression and completion rates were highest in the natural sciences where a much larger proportion of students received funding and studied full time.

Mouton said that "it is unlikely that the system will reach the target, set by the NDP [National Development Plan] of 5000 PhDs by 2030". Furthermore, the percentage of academic staff with PhDs was unlikely to reach the NDP's target of 75%.

Finally, Mouton made the gloomy forecast that "the burden of supervision on the top 10 to 12 universities already producing 90% of doctoral output will continue to increase. Students will continue to flock to the top universities which have better completion rates and more resources. The already very skewed HE system ... is likely to continue as is and may even become more skewed" (videorecording <http://utlo.ukzn.ac.za/mouton-seminar> and <http://indabaonline.ukzn.ac.za/StoryPrinter.aspx?id+2131>).

Four years later, Prof Mouton's gloomy forecast was proven correct, as reported by the Ministerial Task Team on the Recruitment, Retention and Progression of Black South African Academics (DHET: 2019).

Neither Mouton nor the NDP took the gender of academic researchers and students into account in their reports on the progression and retention rates of postgraduate students. However, in the international literature on postgraduate study the 'leaky pipeline' is a metaphor used to describe the loss of women in STEM (Science, Technology, Engineering and Maths) disciplines before they reach senior roles in academia such as full Professor (Ysseldyk, Greenaway et al., 2019: 1). Ten years previously, Blickenstaff (2005) observed that not only are women under-represented in STEM majors and careers in most industrialised countries of the world but that the leaky pipeline is persistent (it does not respond to treatment) and progressive (the further along the pipeline, the fewer women you find).

The South African Ministerial Task Team Report (2019: 13) noted that "the pipeline decreases substantially (i.e. narrows) as students progress from undergraduate to postgraduate study". The reason given in the report is that "the minimum time given for a doctoral programme taken full-time would be three years. However, the 2015 DST study ... has shown that the majority of students work while completing their doctorates and are therefore part-time." Therefore, the time to completion is given as five years". African and coloured students had the lowest throughput rates, with Indian and with white students being the highest. The task team (2019: 19) observed that multiple factors combined to create a small and inequitable postgraduate pipeline. The task team did not include the gender of postgraduate students and their supervisors as a factor contributing to the leaky pipeline.

Ysseldyk et al. (2019) note that there is substantial evidence, as well as recorded subjective experience, that women in the USA are not valued to the same extent as their male counterparts. There is sexism in the academy and the workplace; gender pay inequity; fewer chances for promotion; less chance of being hired in the first place; and, critically, life transitions such as at what time in their careers women marry and have children. Worldwide, studies indicate that female academics are underrepresented at the senior levels of associate and full professor.

In South Africa, similar structures and policies contribute to the unequal treatment of women who experience the constraints and stressors of the academic pipeline both as students and as academics (Mawela 2014: 71-2).

## References

Blickenstaff, J. C. 2005. Women and science careers: Leaky pipeline or gender filter? *Gender and Education*, 17(4): 369–386. <https://doi.org/10.1080/09540250500145072>

Mawela T. 2014 The Journey of Female Professors in South Africa. In: Thege B., Popescu-Willigmann S., Pioch R., Badri-Höher S. (eds) *Paths to Career and Success for Women in Science*. Springer VS, Wiesbaden. [https://doi.org/10.1007/978-3-658-04061-1\\_4](https://doi.org/10.1007/978-3-658-04061-1_4)

Mouton, J. 2015. *The Leaky Pipeline of Doctoral Production in South Africa*. <https://indabaonline.ukzn.ac.za/StoryPrinter.aspx?id+2131> .

Ysseldyk, R., Greenaway, K. H. et al. 2019. Academic Pipeline: Identity and Health among Postdoctoral Women. *Frontiers in Psychology*, (10) 1-17.

## 8. Scholarship of Teaching & Learning

The purpose and value of the Scholarship of Teaching and Learning (SoTL) have been disputed in the global North and South, including in South Africa. Writing in South Africa, Pitso (2013) noted that some universities understand SoTL to be a means for academics to expand their scholarship beyond their established fields of disciplinary research. This was the understanding proposed by the originator of SoTL, Boyer (1990). Other universities understand and use SoTL to achieve different objectives, including to promote scholarly approaches and practices associated with teaching and learning and to address the needs of a rapidly expanding and changing student population, particularly at undergraduate level.

Pitso (2013) selected seven research universities in South Africa to explore how SoTL was understood and applied to achieve objectives related to its purposes in the institution. He found that some institutions used SoTL to broaden and deepen scholarship in teaching and learning to complement other fields of enquiry and research. Research conducted under the banner of SoTL could now lead to rewards of promotion and tenure in academic institutions. Many research and comprehensive universities in South Africa developed and implemented such measures to reward academics who engaged in research into the teaching, learning and assessment practices used in their disciplines.

As student bodies of most universities began to grow and change in response to government policy following liberation in 1994, Centres of Learning and Teaching were established to focus on research and evaluation which would improve student learning and staff teaching. These centres began by exploring innovative ways to teach large classes and employ new educational technologies. They worked with academic staff in their own institutions and began to influence the uptake of new teaching and learning practices in teacher education curricula. The move from SoTL to Academic Development (AD) in Centres for Learning and Teaching was an important shift in focus for educationists and others. AD practitioners, often affiliated to specific disciplines, continued to conduct and disseminate research through publication, in-house conferences and events.

SoTL did not disappear. Rhodes University holds a successful annual conference in learning and teaching in higher education that attracts contributions from local, regional and international academic staff. Most universities now have a Learning Innovation and Quality Enhancement Grant to promote best practice in academic development (Pitso, 2013: 205). One comprehensive university, the University of Johannesburg, hosts a biennial conference 'SoTL in the South'. The November 2021 conference is rooted in the struggles of universities of the South to provide online learning and teaching during the Covid pandemic. Other issues that the conference will address are institutional responses to violent protest action from students in South Africa and other countries of the global South demanding free public higher education and the decolonisation of the university curriculum; issues surrounding adequate funding for public universities; and the apparently eternal domination of universities in the North with regard to research, publication and the dissemination of knowledge. These proposals link SoTL in the South to the social justice principles advocated by Nancy Fraser (2008 and 2009). Signalling a change in focus, Leibowitz and Bozalek (2016) advocate that

academic developers, participants in SoTL in the South, and student activists should all engage with and in 'socially just pedagogy' to bring about participatory social justice in universities.

## References

Fraser, N. 2008. Reframing Justice in a Globalising World. In K. Olsen (Ed.), *Adding Insult to Injury: Nancy Fraser Debates her Critics*: 273-291. London: Verso.

Fraser, N. 2009. *Scales of Justice: Reimagining Political Space in a Globalizing World*. New York: Columbia University Press.

Pitso, T. 2003. *South African Journal of Higher Education*, 27(1): 196-208.

Leibowitz, B. and Bozalek, V. 2016. The Scholarship of teaching and learning from a social justice perspective. *Teaching in Higher Education*, 21(2): 109-122.

## 9. Models of supervision

The one-to-one, or master-apprentice, model of student-supervisor relations is still common in higher education research in South Africa and the UK, especially in humanities and social science disciplines. Studies undertaken in the UK, Australia and New Zealand, for example by Wisker (2005), indicate that the one-on-one model is key to student success, understood as timely completion of higher degrees and better opportunities for employment upon completion of the degree (Harrison & Grant, 2015: 5). However, ongoing changes in higher education worldwide are likely to affect traditional supervisory models and relationships. Harrison and Grant (2015) point out that technological developments and new modes of conducting research and education (including blended and online learning as well as more recent web-based resources) may impact negatively on the development of interpersonal relationships between the supervisor and the student but also provide an alternative, or supplement, to the one-to-one mode of learning. The authors assert, on balance, that new technologies offer ways to extend and improve research supervision rather than detract from it.

Financial pressures on the higher education sector worldwide may be a more significant factor affecting supervision models. Staff reductions impact negatively on the number of highly qualified and experienced researchers available to provide supervision (Harrison & Grant, 2015). Severe funding cuts, such as those imposed on universities in South Africa in the past decade and more recently due to COVID-19, may lead to fewer resources and services for postgraduate students and academic staff at institutional and departmental levels. In many South African universities, there are now fewer opportunities for qualifying students to study at postgraduate level either in South Africa or overseas. Obligations to repay 'black tax'<sup>10</sup> and 'historical debt' may also prevent many students from embarking on or completing postgraduate study. The ways in which student participation in protest action ('Rhodes Must

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<sup>10</sup> <https://www.news24.com/citypress/voices/stop-misusing-the-term-black-tax-20191213>

Fall,' 'Fees Must Fall') may have affected postgraduate students and their studies has not yet been studied.

Harrison and Grant (2015, 556-7) point to an increase in the diversity of degrees (in Europe, Australia, New Zealand and the USA), including the growth of the professional doctorate, as leading to a more diverse student population with a wider range of learning styles and support needs and hence a need for new models of supervision.

The one-to-one model of supervision is still common in many disciplines and universities and is not inherently hierarchical. However, it does assume transmission of knowledge and skills from a highly knowledgeable and/or skilled individual to one who is less so and who receives and assimilates that knowledge. The student-receiver may have little control over the content, pace and direction of learning (Harrison & Grant, 2015: 558). Given these pressures, alternatives to the one-to-one apprenticeship model of supervision are perhaps inevitable. Promising models to explore include the collaborative cohort model, small group supervision as well as the use of mentoring and coaching techniques to support students to work more productively and independently (Wadee et al., 2010).

Harrison and Grant (2015: 560) propose that practice-based supervision and research in music, the visual arts and creative writing can also open up opportunities for supervisory practices that do not position the supervisor as an expert or master but alongside the student, sharing the ownership and responsibility for the research. Many of these relationships portray supervision as a partnership in research and writing rather than an autocracy, with more 'balanced' power relations.

Backhouse (2009) conducted a searching study into supervision modes and student responses in four academic units at three universities in South Africa. She identified four 'patterns of practice' in addition to the traditional one-on-one supervision practices in use in each unit. The four practices she identified were the 'individualist', the 'networked', the 'loose cohort' and the 'small team', each characterised by several variables: the degree to which the research was independent or part of a larger project; the opportunities for PhD candidates to interact with other students and academic staff; the way in which doctoral study was funded; and the number of research students and supervisors in the unit. Backhouse concluded that "some doctoral students recognised the limitations of the individualist [one-to-one] and loose cohort models and initiated their own networks with people who worked in similar areas, outside the project structure that the academic unit put in place." Cultivating the initiatives of individuals (students) to create their own networks could supplement the traditional individualist one-on-one model and relieve some of the isolation associated with it.

Finally, instead of models of supervision, Lee (2008) describes five approaches that a supervisor may adopt based on what she considers important with respect to her personal beliefs and experience. Presented in a table, Lee shows that each of the five supervisor approaches ('functional,' 'enculturation,' 'critical thinking', 'emancipation' and 'relationship development' is related to 1) the knowledge and skills required by the supervisor to implement the approach successfully and 2) the possible student reaction. Both novice and



experienced supervisors appear to find Lee's (2008) table meaningful not only in terms of identifying or labelling one's own approach to supervision but also of acknowledging the diversity of knowledge and skills required to implement the approach and to anticipate possible student responses.

## References

- Badenhorst, C. 2010. *Dissertation Writing: A Research Journey*. Pretoria: van Schaik.
- Backhouse, J. 2009. Patterns of practice in South African doctoral education: an empirical study. Paper presented at the Postgraduate Supervision: Research and Practice Conference, 28-30 April 2009, Stellenbosch.
- Chowdhury, R. 2019. From Black Pain to Rhodes Must Fall: A Rejectionist Perspective. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04350-1>
- Harrison, S. and Grant, C. 2015. Exploring new models of research pedagogy: Time to let go of master-apprentice style supervision? *Teaching in Higher Education*, 20(5): 555-566.
- Hemer, S.R. 2012. Informality, power and relationships in postgraduate supervision: supervising PhD candidates over coffee. *Higher Education Research and Development*, 31(6), 827-839.
- Lee, A. 2008. How are doctoral students supervised? Concepts of doctoral supervision. *Studies in Higher Education*, 33(3).
- Wadee, A., Keane, M., Dietz, T. & Hay, D. 2010. Effective PhD Supervision, Mentoring and Coaching. 2<sup>nd</sup> Edition. *South Africa-Netherlands research Programme on Alternatives in Development*. Netherlands: Rosenberg Publishers.
- Wisker, G. 2005. *The good supervisor: Supervising postgraduate and undergraduate research for doctoral theses and dissertations*. Basingstoke: Palgrave Macmillan.

## 10. Doctoral Pedagogy

In South Africa, doctoral students usually have access to courses, workshops and programmes (see HELTASA<sup>11</sup>); books outlining the entire PhD process (Mouton, 2001); language specific guidance (Badenhorst, 2008; Kamler & Thomson, 2006); university-specific guides; and numerous online resources such as 'Doing a doctorate'<sup>12</sup>; Enhancing Postgraduate Environments<sup>13</sup>; as well as, at some institutions, access to mentors such as the Accelerated Academic Mentorship programme (AAMP).<sup>14</sup>

It is clear that a great deal of doctoral level 'teaching' happens outside the student-supervisor relationship. The term 'Supervisor' gives a sense of a senior person over-looking, project

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<sup>11</sup> <https://heltasa.org.za/launch-of-heltasa-dhet-phd-programme/>

<sup>12</sup> <https://www.vitae.ac.uk/doing-research/doing-a-doctorate>

<sup>13</sup> <https://postgradenvironments.com/>

<sup>14</sup> <https://www.youtube.com/watch?v=AhYrKSjmbDQ>

managing and quality controlling. The alternative 'Promotor,' used at a number of institutions, suggests a 'champion' rather like an academic referee for the student's work. The notion of teaching and learning at doctoral level seems to be met with some awkwardness. Time to completion is a key measure of achievement (Harrison & Grant, 2015). Colleagues frequently ask a doctoral candidate, 'How far are you?' 'When will you finish?' rather than 'What are you discovering?' 'What have you learnt?' Time to completion is a key measure of achievement (Harrison & Grant, 2015).

And yet teaching at doctoral level is a specialised skill that needs to be developed beyond the experience of a supervisor having undergone supervision themselves (Grossman & Crowther, 2015) or researchers finding themselves supervising as an aspect of a research project without having aspired to supervision as part of their career (Bitzer & Albertyn, 2011). McKenna, Clarence, Fincham, Boughey, Wels & van den Heuvel (2017) acknowledge that supervision is a complex and changing encounter. It requires an understanding of the inter-connection between teaching methodologies embedded in the research(er) development process (Lee, 2009). Pedagogical approaches to supervision become even more complex with moves for research to move toward inter-disciplinarity and international or national collaboration (Bitzer, 2011) as well as with the increasing use of on-line supervision (Gray & Crosta, 2019). Even if supervisors are experienced and have enhanced their practice through supervision courses, the supervision process is affected by the institutional, national, and global context (Motshoane & McKenna, 2014). In a system that has historically privileged access by White students, Le Grange (2018:1) points out that "Doctoral education in the South African system cannot be delinked from the vast disparities of under-production across historically marginalised groups based on race and gender."

A great deal of research into supervision focusses on the student-supervisor relationship. This is not surprising as doctoral pedagogy is a mode of teaching that is long-term, with high stakes, has a relatively low completion rate and is dependent, to a large extent, on good communication, mutual respect and understanding between supervisor (and co-supervisor) and student. The aspect of co-supervision often adds to the complexity of relationship dynamics and is not well conceptualised in the student-supervisor-co-supervisor team, as aptly stated in the title of the paper by Grossman and Crowther (2015), "*Ensuring the right hand knows what the left hand is doing*".

Hemer (2012) advocates a relaxed interaction in the teaching relationship where an informal meeting place can reduce the student's anxiety about a power dynamic. Many supervisors take into account the affective experiences of the student and work to develop a long-term collegial partnership. Lee (2007) recognises 'Relationship' as one of the key approaches to supervision; the other approaches in her model (not necessarily discrete and separate) are Emancipation; Critical thinking; Enculturation; and Functional. Gray and Crosta (2019) also propose a model with three similar components: Enculturation; Emancipation; and Healthy Relationship. These three themes of 'good practice' in supervision speak to a novice researcher being inducted into, and finding an identity within, a community of practice; developing as a researcher beyond the existing knowledge boundaries; and learning

collaboration and healthy communication. Grant and McKinley (2011) propose a different model that includes Lusted's (1986) three 'agencies' of a transformative pedagogy (supervisor, student and knowledge) and take an indigenous perspective that leads to considering boundaries between the university and its outside communities and between Western academic knowledge and Māori indigenous knowledges. Following on from the nurturing aspect of supervision and the wide influence reading for a PhD has on a student's life, many institutions assign mentors to students or set up cohort groups.

Much has been written on mentoring in supervision pedagogy (Guccione & Hutchinson, 2021) and to a lesser extent coaching which Wade, Keane Dietz and Hay (2010) propose is a learning-centred, reflective and holistic practice unlike that described by Le Grange (2018:1) who contrasts coaching with mentoring by stating "coaching [has a] mere task-oriented focus". Le Grange presents a critical reflection on mentoring and the power dynamics implied in the terms 'mentor-mentee' as well as the "role of mentorship in the scholarly becoming of the doctoral candidate [and explores] becoming-other in the doctoral supervision process" within a complex system where both candidate and supervisor engage in mutual learning and becoming. This interesting point raises the oft-overlooked aspect of the learning the supervisor gains from the student.

There is wide agreement in the literature nationally and internationally in relation to doctoral education that models of supervision practice need revisiting, that culture and decolonisation should be considered more deliberately, that online learning, collaboration and transdisciplinary work are becoming more important and that supervisors do not necessarily have the skills and pedagogical knowledge to supervise without the support of specialist courses.

A great deal has been omitted in this brief review: cross-cultural supervision (Manathunga, 2017); cohort teaching (Samuel & Vithal, 2011); online learning in supervision (Brodin, Linden, Sonesson & Lindberg-Sand, 2020; Mariaye & Samuel, 2020); the contrasting expectations of supervisors and students (Aspland, Edwards, O'Leary and Ryan, 1999; Keane & Wade, 2018); developing researcher capabilities (Lamberti & Keane, 2021) and exit attributes (Pillay & Samuel, 2018); the influence of industry on doctoral studies (Frick, Mckenna & Muthama, 2017) and professional doctorates (Moodley & Samuel, 2018); assessment and examination (Mullins & Kelley, 2010; Hodgson, 2020); and responses to COVID-19 which has disrupted lives and learning for over a year (Samuel, 2020). All of these impact on doctoral pedagogy and should be considered within any supervisory relationship and context.

## References

Aspland, T., Edwards, H, O'Leary, J., & Ryan, Y. (1999). Tracking New Directions in the Evaluation of Postgraduate Supervision, *Innovative Higher Education*, 24(2), 127-147

Badenhorst, C. (2008). *Dissertation Writing: A Research Journey*. Pretoria: Van Schaik.

- Bitzer, E. (2011). Doctoral Success as Ongoing Quality Business: A Possible Conceptual Framework. *South African Journal of Higher Education*. 25(3): 425–443.
- Bitzer, E. M. & Albertyn, R. M. (2011). Alternative Approaches to Postgraduate Supervision: A Planning Tool to Facilitate Supervisory Processes. *South African Journal of Higher Education*, 25(5): 875-888.
- Brodin, E.M., Linden, J. Sonesson, A. & Lindberg-Sand, A. (2020). *Doctoral supervision in theory and practice*. Sweden: Suomalainen.
- Frick, L., Mckenna, S., & Muthama, E. (2017). Death of the PhD: when industry partners determine doctoral outcomes, *Higher Education Research & Development*, 36(2): 444-447.
- Grant, B.M. & McKinley, E. (2011). Colouring the pedagogy of doctoral supervision. Considering supervisor, student and knowledge through the lens of ingenuity, *Education and Teaching Intonations* 48(4): 365-374.
- Gray, M.A. & Crosta, L. (2019). New perspectives in online doctoral supervision: a systematic literature review, *Studies in Continuing Education*, 41:2, 173-190, DOI: [10.1080/0158037X.2018.1532405](https://doi.org/10.1080/0158037X.2018.1532405)
- Grossman, E. S. & Crowther, N. J. (2015). Co-supervision in postgraduate training: Ensuring the right hand knows what the left hand is doing. *South African Journal of Science*. 111(11-12): 1-8.
- Guccione, K. & Hutchinson, S. (2021). *Coaching and Mentoring for Academic Development*. UK: Emerald Publishing.
- Harrison, S. & Grant, C. (2015). Exploring new models of research pedagogy: Time to let go of master-apprentice style supervision? *Teaching in Higher Education*. 20(5): 555-566.
- Hemer, S. R. (2012). Informality, power and relationships in postgraduate supervision: supervising PhD candidates over coffee. *Higher Education Research and Development*. 31(6): 827-839.
- Hodgson, D. (2020) Helping doctoral students understand PhD thesis examination expectations: A framework and a tool for supervision. *Active Learning in Higher Education*. 21(1): 51-63. <https://doi.org/10.1177/1469787417742020>
- Kamler, B. & Thomson, P. (2006). *Helping Doctoral Students Write: Pedagogies for Supervision*. Canada: Routledge.
- Keane, M. & Wadee, A.A. (2018). 'The unspoken conversations between supervisor and student.' Quality in postgraduate Research (QPR): Impact, Engagement, and Doctoral Education, 17-19 April, Adelaide, Australia.
- Lamberti, P. & Keane, M. (2021). The Vitae researcher development framework in South African postgraduate education. *The global scholar: Implications for postgraduate studies and supervision*. Stellenbosch: SUN MEDIA.

Lamberti, P. Keane, M. & van der Westhuizen, G. (2019). 'Towards a (post)graduate development framework for the global south.' Postgraduate Supervision Conference, Stellenbosch, 26-29 March, 2019.

Le Grange, L. (2018). Mentorship, doctoral supervision and becoming, in (Ed.) P. Du Preez. *A scholarship of doctoral education: On becoming a researcher*. Stellenbosch: SUN MeDIA. [https://www.researchgate.net/publication/342667035\\_Mentorship\\_doctoral\\_supervision\\_and\\_becoming](https://www.researchgate.net/publication/342667035_Mentorship_doctoral_supervision_and_becoming)

Lee, N. (2009). *Achieving Your Professional Doctorate*. Maidenhead: Open University Press.

Lee, A.M. (2007). Developing effective supervisors: Concepts of research supervision. *South African Journal of Higher Education*, 21(4): 680-693

Lusted, D. (1986). Why pedagogy? *Screen*, 27(5): 2–14.

Manathunga, C. (2017). Intercultural doctoral supervision: The centrality of place, time and other forms of knowledge. *Arts and Humanities in Higher Education*, 16(1): 113–124. <https://doi.org/10.1177/1474022215580119>

Mariaye H. & Samuel M.A. (2020). From Digital Leap to Epistemic Leap? The challenge of transitioning two international doctoral programmes to an online mode of delivery. In Amin, N. & Dhunpath, R. (Eds.) *(Re) learning to teach in contexts of crises*. Durban: Alternations.

McKenna, S., Clarence, Fincham, J., Boughey, C., Wels, H. & van den Heuvel, H. (Eds.) (2017). *Strengthening Postgraduate Supervision*. Stellenbosch: SUN MeDIA.

Moodley, T. & Samuel, M. A. (2018). The rise of professional doctorates: A comparative study of psychology and music. 57-90. In Du Preez, P. & Simmonds, S. (Eds.) *A scholarship of doctoral education: On becoming a researcher*. Stellenbosch: SUN MeDAI ISBN 978-1-928357-92-6 <https://doi.org/10.18820/9781928357933>

Motshoane, P. & McKenna, S. (2014). More Than Agency: The Multiple Mechanisms Affecting Postgraduate Education. In (Eds.) E. Bitzer, R. Albertyn, L. Frick, B. Grant & F. Kelly *Pushing boundaries in Postgraduate Supervision*. Stellenbosch: SUN MeDIA . Available from: [https://www.researchgate.net/publication/350020184\\_Crossing\\_the\\_border\\_from\\_candidate\\_to\\_supervisor\\_the\\_need\\_for\\_appropriate\\_development#fullTextFileContent](https://www.researchgate.net/publication/350020184_Crossing_the_border_from_candidate_to_supervisor_the_need_for_appropriate_development#fullTextFileContent) [accessed Apr 08 2021].

Motshoane, P. & McKenna, S. (2021). Crossing the border from candidate to supervisor: the need for appropriate development. *Teaching in Higher Education*, DOI: 10.1080/13562517.2021.1900814

Mouton, J. (2001). *How to Succeed in Your Master's & Doctoral Studies: A South African Guide and Resource Book*. Goodwood: Van Schaik.

Mullins, G. & Kelley, M. (2010). 'It's a PhD, not a Nobel Prize': how experienced examiners assess research theses, *Studies in Higher Education*, 27(4), 369-386.

Pillay, M. & Samuel, M. A. (2018). What do they leave with? Doctoral Exit attributes. In Du Preez, P., Simmonds, S. (eds.). *A scholarship of doctoral education: On becoming a researcher*: 249-273. Stellenbosch: SUN MeDIA. Available at: <https://doi.org/10.18820/9781928357933>

Samuel, M. A. (2020). Shifting literacies and positionalities in COVID-19 times: The launching of the Higher Education Learning and Teaching in South Africa (HELTASA) doctoral studies programme. In Higher Education Learning and Teaching Association (HELTASA) Compilation of Short and Sharp and Socially Aware (SASASA) pieces on teaching and learning in response to COVID-19. <http://heltasa.org.za/shifting-literacies-and-positionalities-in-covid-19-times-the-launch-of-the-heltasa-doctoral-studies-programme/> Retrieved 05 May 2020.

Samuel, M. & Vithal, R. (2011). Emergent frameworks of research teaching and learning in a cohort-based doctoral programme. *Perspectives in Education*, 29(3): 76-87. Special edition: The changing face of doctoral education in South Africa.

Wadee, A., Keane, M., Dietz, T. & Hay, D. (2010). *Effective PhD Supervision, Mentoring and Coaching*. 2<sup>nd</sup> Edition. South Africa-Netherlands Research Programme on Alternatives in Development. Netherlands: Rosenberg Publishers.

Zeegers, M. & Barron, D. (2012). Pedagogical concerns in doctoral supervision: A challenge for pedagogy. *Quality Assurance in Education*, 20: 20–30.