

Values and Purposes of a PhD: Comparative responses from South Africa and Mauritius¹

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Abstract. This paper compares the motivations of two developing countries, South Africa and Mauritius, in promoting doctoral education. Both are concerned about addressing their underproduction of PhDs, but is this focus a luxury in the face of prevalent societal issues, e.g., the HIV/AIDS pandemic, crime and unemployment in South Africa? Are PhDs resolving post-apartheid societal problems? Is their pursuit primarily about developing a competitive advantage? In Mauritius, alignment of the state agenda and the higher education system provides pragmatic interventions to establish itself as the knowledge hub of the Indian Ocean islands. However, the philosophically-driven PhD infuses potentially a critical disruption of “comfortable collaborations” with the state agenda. So what is the worth of a PhD, especially in the field of education?

This paper suggests that the value of an educational PhD in developing world contexts has both enabling and constraining potential: to personal, institutional, social and nationalistic agendas.

Keywords: Doctoral under-productivity in developing world contexts; the economic, national, personal and social values of PhD study; professional doctorates and PhDs; doctoral career paths; PhDs in Education; globalization and internationalization; social justice, and education

Introduction

Interest in expansion of the higher education system is a worldwide phenomenon characterized by varied agendas, including the attempt to address the backlog in the production of graduates specifically in developing world contexts (Teferra, 2014); elevation of the status of an institution’s standing within the regional, national and global community (Mohammedbhai, 2008), and the belief in the potential of

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higher education as a driver of economic growth (Bloom, Canning, Chan & Luca, 2014). More recently the agenda has shifted beyond the justification of the investment in higher education mooted by quantitative “return on investment” research analysis (Psacharaopoulos & Patrinos, 2004; Lin, 2004) towards understanding the impact of higher education on the social justice campaigns of a given context. For example, the need to develop a more equitable profile of the educated workforce and their contribution to the wider society is the subject of such studies (Darvas, Ballal & Fedaa, 2014). This paper underscores a questioning of the purpose of higher education, especially doctoral education drawing from an insider comparative case study of the interest in the production of PhDs in Education in South Africa and Mauritius. Firstly, the specific contextual landscapes of the partner institutions, one within which the author currently works, in a wider national terrain are explored. Secondly, the paper presents the kinds of options for these historically linked developing world contexts, both located in the international South. The purpose, form, direction, and delivery choices for doctoral studies frame the debate in relation to a socially-relevant, appropriate engagement in this form of higher education. The paper concludes with prospective speculation about the future of the models employed in the case study comparison, raising broader suggestions for international collaborative partnership in doctoral education.

What is the purpose of the doctorate?

Despite attempts to accentuate investment in education to the primary and secondary school systems in the wake of the Education for all Dakar 2000 Summit, it is a commonly articulated assumption that higher education is an additional means to the development of a society’s economy (Bloom et al., 2014). This relationship between a highly educated labor force and economic growth, Bloom et al (*ibid.*) argue is not a sole agenda of the higher education system alone, but one which relies on an intersection of responsibilities of both private and public channels. While the private sector is driven primarily by its logic of better efficiencies, greater productivity, richer yield, and wider penetration of the market, the public sector might arguably focus on the benefits for the wider social system, the safety and security of its citizens; the interests in innovation; and development for yielding a better quality of life. How these two agendas compete or relate is increasingly the subject of analyses in many countries: Australia (Thompson et al., 2001), the European context (Kehm, 2007; Casey, 2009), the United States of America (Nerad & Heggelund, 2008); and South Africa (Deacon, Osman & Buchler, 2009). Is the pursuit of higher education and doctoral education an agenda dominated by a competitive goal to outdo one’s rivals, either at the institutional, regional or national level? How is doctoral education implicated in the development of positionality and status across the global community? Or, is doctoral education/ higher education complicit in serving purely instrumentalist rather than communal social agendas? Is higher education increasingly becoming commodified in its emphasis upon “wealth generation” adopting models from its private sector conduits? Has the

agenda of higher education as autonomous producers of new knowledge become compromised? These issues raise fundamental questions about which kind of economy higher education and doctoral education is responding to? Is it possible that serving the agenda of business and industry, the formal economy, are increasingly becoming the benchmarks of a productive university/ higher education system?

What are some of the possible reasons why such questions are being asked? A concern arises when higher education institutions deviate from an important constitutive role as a producer of new knowledge, a contributor to “the knowledge economy”. One of the reasons for the development of doctoral graduates is to produce the next generation of academics who will themselves lead the innovative direction, theoretically, methodologically and contextually. However, how many of these assumptions about the purpose of higher education and doctoral education are indeed being fulfilled?

Firstly, it may be argued that while the idealistic interest of professors of postgraduate education is to ensure continuity of research and teaching scholarly traditions established within a discipline, and that this may explain their expansion of the intake of doctoral graduates, it is a truism that many more doctorates are produced than can be absorbed into the body of academia (Nerad, 2009; Nerad, Rudd, Morrison & Picciano, 2007; Nerad, Aanerud & Cerny, 2004). This could be simply a matter of the economic downturn reducing hiring expansion of staffing resources in higher education globally (Mohamedbhai, 2008). Secondly, given the limited absorption of doctoral graduates into academia and the highly restricted selective processes of recruiting, there is a tendency that doctoral graduate apprentices might be more prone to strategically adopt the theoretical, methodological values of their master supervisors. This raises questions about whether doctoral education is indeed about strategic imitation rather than scholarly innovation. The restricted economic growth contexts of many countries might also contribute to stagnation and cloning of the knowledge economy rather than its expansion. Many aspirant employee graduates are likely therefore to interpret doctoral education not as a matter of boundary crossing, but of developing strategies to enhance their employability. Receiving a doctorate might be more about generating the appropriate visa into the world of work rather than into challenging the normative existing body of knowledge.

Angelier (2012), in her examination of the operations of “the laboratory model” established between higher education and the private sector in the French context, described how the partnership between business, industry, or even social non-business/industry structures, and the university system could generate a dependency on the host company who contract apprentices and dictate the agenda of the educational research undertaken by “employee doctoral students”. The model can be applauded for its ability to ensure the development of a generation of employed graduates, but it raises questions about the degree of potential independence of the kinds of knowledge being developed. Moreover, when the funding resources donated by the host companies are substantial this increases the likelihood of a skewed agenda. Compliance is oftentimes likely to drive the agenda; expediency is an understood driver of this system (Badley, 2009). So what is the doctorate for: pleasing a potential

boss—getting a job?

A further hidden assumption of an overly dictated “outside-in” doctoral education agenda is that the graduate is constructed as a cog in the greater machinery of the economic system. It unconsciously perhaps, perpetuates the worldview that education is a commodity to be bargained in the marketplace. PhDs in this agenda are most likely to be dictated by the agenda of the employer, and this employer can equally be a state department or parastate organization, such as is the case with teacher education and some research councils. A largely econometric understanding is the hidden curriculum. Within such a worldview (which does not always necessarily have to be the case), doctoral education is seen as preparation to set oneself apart from the ordinary masses, those who cannot afford or receive this highest form of educational investment. Elitism is its byproduct, where the status of earning a doctorate dominates. The titles, honorifics and the adulations afforded to doctoral graduates are what drive their interest. Doctoral education in this “outside-in” model might be about enhancing the “selfish” rather than the “self-in-service” rationale. This after all is the goal of an econometric world where competition, advancement over others dominates and the doctoral educated graduate is being inducted into these worldviews. However, is it possible that both the agenda of the “self,” personal ambition and the “self-in-service,” social responsiveness, can become compatible?

The developing world context and doctoral education

This section raises the specific contextual considerations that characterize the developing world contexts and asks whether doctoral graduates are indeed being attracted to addressing these issues. This listing is simply to suggest that the social relevance agenda is increasingly important and that ethical and humanitarian concerns ought to be at the forefront of doctoral graduates. However, as discussed above, the econometric self-enrichment agenda dominates their outlooks and these social, cultural, and political issues are likely to fade into insignificance.

Chisholm (2004) argues that no education system can be oblivious to the increasing income differentials between the have’s and the have not’s. In the South African context this is particularly important as a distorted belief that mobility of a relatively small elite Black minority is sufficient demonstration of a “radical transformation”. Perhaps, like many other post-independence countries, this only confirms that the struggle for the demise of apartheid or colonial rule was not simply a matter against racial or empire governance oppressions, but also against class oppression. Furthermore, Bloch (2009) argues that we are living in a “toxic mix of factors responsible for the failure of South African schools”. He unabashedly shows how both the national post-apartheid state systems and teachers themselves are complicit in what is wrong with our schools. Nevertheless, he shows glimmers of possibilities for those schools and individuals who choose alternative regimes of educational leadership and commitment. Whether his model of educational leadership and

governance is culturally-loaded preferences is further grounds for research.

Sesnan's (2005, 2009) analysis of the fluidity of the movement of large populations due to voluntary and forced migration, driven by their seeking better job prospects across borders, or due to the ravages of war, political, famine, or natural disasters provide insight into humanity in transience, a people in exile. Uncertainty and fragility; disconnectivity with one's cultural, social and political infrastructures, or geographic homelands results in groups of people living in poverty, potential exploitation, and neglect. The education in refugee camps is an example of the possibilities for reconstruction of the livelihoods, but more enduring psychological and sociological devastations often accompany these ravaged communities. These experiences are perhaps also accentuated as people cross borders even into relatively stable, developed or more affluent countries, or even as they migrate internally within one country.

The normative role of education models imposed from colonial heritages onto indigenous communities is also a concern in developing world contexts aiming to generate their own independent identities. Several researchers are placing on the agenda the unique form of educational operations that characterize specific groups in special social settings: for example, learners who are part of the nomadic education systems that have operated for centuries in the Islamic education system in Nigeria (Ndadozie and Samuel, forthcoming), and in the specific cultural systems underpinning the schooling in rural South African contexts (Balfour, Mitchell & Moletsane, 2008). Rather than pathologize these alternative systems, researchers are asking to celebrate rather than condemn their unique interpretations of the purpose, form and responsiveness of schooling and education.

The key driver to education transformation is arguably the pivotal constituent: namely the competent, committed, and caring professional teachers (Samuel, 2012, 2014). However, increasingly these teachers are constructed not as "agents of change", but as instruments of agendas constructed by political and ideological forces (Carrim, 2003). How does this impact the quality of the delivery of education when a large percentage of teachers across the developing world may not themselves be recipients of a well-rounded education system? State-driven imperatives to turn around this context might be interpreted as another form of imposing hegemonic control. Moreover, the health status of practicing teachers is an equally real influence over the malaise of the system. The HSRC (2005b) South African study exploring methods of dealing with the under-productivity of new teachers in an expanding system, noted the lack of job satisfaction of teachers, 55% of whom expressed an interest in leaving the profession if they could find alternative employment. Most alarming was the empirically determined HIV+ status of 12.7% of teachers in a national average in the South African context. The impact on the health and well-being of teachers in the face of increasingly new curricular reform provides specific contextual realities for the developing world context. So which of these agendas is driving the kinds of topics that professors, researchers and doctoral graduates are choosing?

While the above seem to suggest that these are matters only in developing world contexts, it

could be argued that the degree or scale of the “problem” manifests itself in other non-developing world contexts as well. However, is doctoral education geared to embrace these social issues? Is it drawing into its main fold not how to become “globally competitive” or how to improve the efficiency of our national/ institutional systems in global measurement indices? Fataar (2014) argues that there is a noticeable sanitisation of our theorising agenda in doctoral/ higher education. He cautions academics that we need to develop a culture of a “pedagogical justice” which embraces the social, political and cultural responsibility to realize better social justice. Our higher education graduates should be emerging with responsiveness to contexts that are appropriate, relevant and feasible to offset our crimes of humanity. Doctoral higher education, therefore, has to be about the preparation of an expansive “outward embracing” of responsibility; both working towards realizing the capacities and capabilities of the wider society system (Samuel & Maistry, 2014; Walker & McLean, 2013; Nussbaum, 2010, 2011). Doctoral education is about generating dignity both of self and of others.

A comparative study of doctoral education in South Africa and Mauritius

Both Mauritius and South African share a heritage of colonial powers of the Dutch, French, Portuguese, and British colonial masters. Patterns of imported indentured migration into the contexts to fuel the local sugarcane economy dominated their early colonial history. However, Indians presently constitute the majority in the Mauritius Island, while they constitute less than 1% in South Africa. The communities of Asian immigrants, Chinese, Malaysian and Indians, chose to see education as a potential escape from their working class status. Investment in education is part of the cultural heritage of both contexts. It is even argued that Indians are perhaps over-represented in public office because of higher qualifications and education status in both contexts. In Mauritius the realization of their independence from the British Empire in 1968 was a relatively benign affair; comparatively the South African struggle for independence from official colonial white minority rule could be characterized as a low level form of civil war as competing groups vied for supremacy. In both contexts the majority population, in Mauritius, the persons of Indian origin, and in South Africa persons of indigenous African origin, came into political power. However, economic power in both contexts is vested in the former colonial power regimes. The owners of economic wealth, though in minority political status, have considerable clout over the cultural identity and direction of the public discourses around matters such as education. The inherited colonial system of education administration permeates all levels of the system, including the preference for mediums of learning and teaching being willingly chosen as a language of access to better economic opportunities, namely French and English. Mauritius consists of a diverse population of approximately 1.2 million people; South Africa is a comparatively wealthy country with a population of over 50 million. Racial undertones characterize many discourses there given the apartheid history of racial preferences being systemically orchestrated as part of the former regime. In Mauritius this takes the form of more

explicit ethnic or religious embattlements. Again the question of how the contextual national historical landscape has come to influence or not the kind of doctoral education imperatives is a question worth exploring.

National pushes

The quest for doctoral education in South Africa took more overt public attention in recent times following a status baseline study conducted by the Academy of Science of South Africa (ASSAf, 2010). Consequently, the National Research Foundation (NRF) echoed the worldwide interest in increasing the backlog of doctoral education suggesting that the system required a five-fold increase in output. This was incentivized by larger state subsidies to universities to generate this output which was racially, regionally, gendered and disciplinarily-skewed. Output of particular higher education institutions (HEIs) reflected the apartheid legacies. This status also coincided with the reorganization and restructuring of the higher education system in new forms of governance arrangements as the state attempted to rearrange relationships between former historically advantaged and under-served higher education institutions. Moreover, the expansion in doctoral education took on a continental footprint as those institutions with sufficient capacity explored further markets to attract students into their programs. The ASSAf (2010) study noted that the post-apartheid system was indeed attracting new African candidates, but that these were largely from the continental rather than the national context. This raised questions about how South Africa was being received and negotiating its relationships across the relatively under-developed neighbouring contexts where new higher education territories were being forged. It also begs the question of the demographic relevance of doctoral education to the local South African context. This reflection on doctoral education was conducted some twenty years after the formal demise of apartheid where racial inequities still prevail in participation rates in higher education.

In the Mauritius context, the agenda of “catching up with rest of the world” (Hayward & Ncayiyana, 2014, p.180) dominates the discourse of present partnerships in higher education. However, this agenda has a long trajectory from its early post-independence history. Mohammedbhai (2008) comments that the production of manpower in early independence, the 1960’s to the 1980s, was fueled through collaborative linkages with the African higher education system. The new elite of post-independence chose to link oftentimes through their colonial networks with other continental research institutions. What is noticeable in the Mauritian context was how quality higher education nevertheless, came to be largely framed by a “northward gaze”, a conscious capitulation to the values of the former colonial powers. Since there were not many opportunities for local higher education postgraduate studies, many undergraduates sought further studies in France, Britain, Canada, India and Malaysia. Despite the interest in graduate studies, the impetus and direction of this research is worth further examination. Hayward and Ncayiyana (2014, pp.181-182)

comment on the general African post-independence continental trends about the focus of the research agenda in these situations:

... research remained woefully undervalued. Given the low or non-existent industrial base and with agriculture at a subsistence level there was little or no commercial demand for applied research, and the value and utility of research in national socioeconomic development went unrecognized by either the universities or the political establishment. The new Africa University was further handicapped by decades of political instability, authoritarian governance, military coups and civil wars in many countries throughout the region. Simultaneously the university struggled against the inevitable decay that resulted from the strategy of 'structural adjustment' imposed by the World Bank and its prioritization of basic education which left higher education virtually abandoned. Among the casualties of all these influences were institutional research, faculty development, and graduate education upon which higher education depends. (2014, 11-182)

Was Mauritius different from other continental histories? It may be argued that the early graduates from abroad chose largely a developmental agenda as part of their research studies. A more detailed analysis of their qualifications is needed to verify any claims, but it is likely that these earlier constructors of a new government regime interpreted their role as opening opportunities for a more diverse society to participate in the formal and informal economy. Teacher education as an opener to other life professionals was given a relative degree of importance in this regard.

However, a new era characterizes present day Mauritius. This arguably is being driven by the shift away from the reliance on an agrarian economy towards an economy driven largely by its connectivity to the region and its attractiveness as tourist destination. The government chose to position the small island as a potential knowledge and service hub within the region exercising the potential power of its use of information communication technologies, and its overt attempts to promote cultural and linguistic diversity through recognition of locally developed linguistic manifestations. The Mauritian Strategic Development Plan (2007) overtly advocates the promotion of educational development and sustained capacity building as one of its features. Building the human resource capital base to drive the economy became a central feature of government thinking (Martin & Bray, 2011, p.104). It should be noted that this repositioning as a powerhouse in the region is being undertaken some fifty years after its original independence, where its footprint in the maritime Indian Ocean island states is being consolidated through its various networks across the region. This arguably is dominated by an economic rather than a purely educational agenda in line with the slow advance of neo-liberal thinking in the global context, or as a strategy for survival in relation to powerful Northern powers.

Both the South African and Mauritian national agendas are couched within the twin discourses of *globalization*, a corporatized market-driven capitalist enterprise, and managing of its *internationalization* engaging acknowledgement of the citizenship beyond nationalistic identities fostered by the ICT possibilities. Producing a "global citizen" is an underpinning characteristically embodying the seeds of its own contradiction of universality and uniqueness. They both share

interests in the agenda of education as an expansion of their economic prowess within the geographic spaces in which they reside. However, the issue of the quality of the partnerships demands further examination.

Institutional forces

This comparative case study chooses only one institution from South Africa, namely the University of KwaZulu-Natal (UKZN) and one institution from Mauritius, the Mauritius Institute of Education (MIE). The former is the institution in which the author works, and the latter is the institution which forged a collaborative capacity-building partnership around doctoral education in the only Mauritian tertiary institution dedicated to teacher education and the schooling system. Further elaboration of this inter-institutional collaboration is presented by Samuel and Mariaye (2014). The initial goal here is to show how the seemingly different institutional agendas are indeed part of similar insights into how higher education in developing world contexts are choosing to interpret the role, function, and hallmarks of a quality doctoral education program.

For the UKZN, interest in pursuing partnership arrangements coincided with the institutional agenda to expand the mission and vision of the institution as a “research-led” institution. Given that the UKZN was an institution that merged two divergent historical legacy institutions with differing profiles and research productivities, the new (2004) UKZN management was eager to expand to consolidate it as a major national competitive research institution. Its agenda was to set it apart from other research institutions since its constituent student body tended to reflect a more representative profile of South Africa’s diverse population. Linking with other African institutions was useful to its marketing motto as the “university of African scholarship”.

The MIE entered into the partnership as part of its evolving history to consolidate its potential as a degree awarding institution. Increasingly study abroad in the North was proving to be an expensive option. The system of the MIE was broadening its scope and mandate and hence a wider percentage of its academic staff needed postgraduate qualifications and research capacity-building. As the only educational institution dealing with matters of the “education system”, the MIE was tasked with a multiple layered agenda beyond its original mandate as simply a teacher training institution producing the personnel for the state-driven education system. Its agenda included curriculum development for the nation’s schools, research for policy, and engagement with developing teachers’ professional growth to implement curricular reform as textbook writers, as well as monitoring of implementation strategies and enactment of new ICT agendas for the system.

Whereas the UKZN interpreted their role as autonomous from the State agenda, the MIE could not fully escape the agenda of “managed intimacy” (Bray, 1991). This relationship refers to a close working collaboration between the state and the higher education institution which has to be carefully orchestrated. The relationship is built on intimate knowledge of each other’s agendas; boundaries

and trespassing into each other's agendas are carefully guarded. Given the geographic smallness of the Mauritian context, personal and political agendas oftentimes coincide and are ever-present in everyday interactions and accountabilities across power differentials are subtly managed. However, higher education institutions (HEIs) in the post-apartheid context are also increasingly being held accountable for the large amounts of state investment in their upkeep and maintenance. The relevance of a completely separate teacher education institution divorced from State agendas is perhaps more potentially possible within the large South African context, given that the number of HEIs and the relative large scale of the project of education. However, the State is able through its HEI funding mechanisms to direct the intake, enrolment and monitoring of graduate output as a feature of quality assurance which is increasingly being interpreted as a "return on state investment" agenda. South African HEIs are increasingly being asked to justify their critical rather than a capitulative stance in relation to the state curriculum reform agenda; increasingly teachers in the education system also expect the HEI to be a provider of practical, concrete rather than theoretical, abstract knowledge enabling them to be successful implementers of curricular changes. This poses serious questions about the independence of the public university system. Whereas the early stages of post-apartheid saw the academics as integral to the construction of new policy considerations, the distance between the State and the higher education system could be arguably more tenuous in present times.

The relational agenda to the State in the MIE is the subject of recent exploration (Samuel & Mariaye, forthcoming). In this exploration the authors argue that the MIE has seen three types of negotiations of the "intimacy" with the State authorities. The first is among the original founding fathers of the MIE who were "*pioneers*" of the post-independence era. These pioneers were themselves educated abroad and chose a "deferred intimacy", which reflected an overt respect of the kind of collaborative partnership with the State. Reform without State partnerships for them was not possible. The second group of "*managers*" in the later 1980s interpreted their role as a form of "strategic intimacy", recognizing the state authorities as the holders of the purse strings of the MIE. They engaged in acknowledging the need to serve the ministerial agendas and the state educational authorities, but simultaneously more subtly infused into the discourse of policy-making, curriculum reform agenda the lessons learnt from their wider international and worldwide theorising. Most state authorities were relied on the MIE and hence were oftentimes easily directed into accepting the MIE's worldviews. However, the third generation of relatively "*newly appointed academics*", appointed in the late 2000's, report that they feel constrained by the kind of deferential perspectives of their more senior colleagues in relation to the state authorities. They are more critical of the chosen paths of Mauritian social and state systems. Their ease of access to global and worldwide discourses present for them a wider range of possibilities and this perhaps suggests a "contested intimacy" with their authorities. This latter group of academics constitutes those who are presently undertaking doctoral education studies in partnership arrangement with other more recent collaborating international

institutions.

Mariaye, Varma and Naëck (2014) argue that within the context of the latter group, there is a possibility that undertaking PhD study could be potentially dangerous. The earlier pioneers and managers were able to negotiate a relatively harmonious relationship with the state authorities and their comfortable collaborations allowed many important inroads to reform the education system and provided investments to expand the operations of MIE. The strong reliance on the expertise of the pioneers and the managers has led to the consolidation and expansion of the MIE to its present status of approximately 5000 student enrolment and 150 academic staff compliment. However, the MIE has not been granted degree awarding status by the state authorities yet, a concern that the new generation may argue confirms their views about patronage or servile unequal pioneer operations at play between the state and the institution. The new generation complain that their interests in pursuing an exclusive research agenda is being stymied by multiple agendas from state authorities, demanding an identity they may not willingly embrace as members of a higher education institution. Autonomy is thus believed to be compromised even though some consultant state work bears immediate and long-term lucrative personal rewards. This poses serious challenges for prospective doctoral students choosing and establishing the worth of their research agendas. Is it possible that the topics the new generation will choose are likely to topple the comfortable collaborations of earlier generations? Will the state authorities devalue or undermine input that these new doctoral researchers will offer?

Another argument against the autonomous generation of research topics is that the new generation of doctoral students might have a more skeptical disrespect for the relationship between research and policy. Increasingly the ideological and political vestiges of official policy trouble many young scholars. This echoes a dissatisfaction of the value of graduate degrees for many young unemployed graduates and is one explanation for the December 2014 replacement of the existing governmental regime in recent national elections. The worthwhileness of a university degree is increasingly being questioned. The higher education context is increasingly asking for support to enact practical engagement with the new curriculum, while PhD studies might increasingly attract researchers/doctoral students to more abstract theoretical concerns. This simply raises the question of the relationship between research *for* practice, research *in* practice, research *of* practice, research *through* practice (Darling-Hammond, 1990). This arguably is not a time for less, but more research. However, the instrumental, economic, value of the education degree or doctoral study is what continues to dominate debates about the purpose of higher education or the PhD.

Both these case studies of the interest in doctoral education reveal a series of tensions as the choice for the hallmarks of doctoral education are established. This is neither neutral nor independent from the social, political, and contextual realities of the two case studies. Moreover, the Mauritian context has to address some specific national choices initiated by the state. MIE is expected to be a partner in such realisation of the following goals: the state is interested in establishing

a graduate in every household; raising of the benchmarks for primary school exit levels for access into the favored secondary school system; developing a more differentiated secondary education systems based on academic and vocational streaming; the digitizing of the school curriculum and the professional development of teachers to enact a technologically rich curriculum; introducing Kreol Morisien (the lingua franca) as an optional subject choice in the primary school. All of these compete as the mandate for the institution. This brings into sharper focus the kinds of doctoral education program which the staff at MIE need to choose.

What kind of doctoral study should be pursued?

Two tables in this section point to the types of doctoral study that should be considered as institutions choose doctoral studies and policy-making decisions around supporting doctoral education. Both are caricatures to make a comparative point, noting that these are not mutually exclusive categories and program design sometimes embraces elements of both typologies. Like all typologies they seek to stereotype to draw attention to the focus of the phenomenon being compared. Table 1 presents the argument that is presently occurring across the globe as different forms of a doctorate are being selected. Not all doctorates need to have the same purpose, function, and outcome. Although some purists might prefer to retain their preferred conceptions of the doctorate's purpose, the table presents the distinguishing features of a *PhD*, a philosophical study, and a *professional practice doctorate (PPD)*, with its emphasis on the world of practice. It is acknowledged that the use of the nomenclature in different contexts points to different demarcations.

Table 2 presents the argument that it is necessary to look at the significant difference between the ways in which doctoral education is pursued by different disciplines or fields. It reflects the differences in the ways *Social Sciences/ Humanities* and the *Natural Sciences* approach the pursuit of doctoral studies. It also highlights the process by which doctoral students are engaged in their everyday work in relation to the production of "new knowledge". Further it is noted that these are general stereotypes that assist to suggest the broad architectural features of these programs but that there are likely to be exceptions uniquely designed in different contextual settings to achieve different purposes.

This debate should also be seen in the light of concern for proliferation of *taught doctorates* which equate the doctoral study to an additional study cycle following a masters' degree. The specificities of contexts may warrant the expectation that some baseline foundation disciplinary knowledge is formally taught to students before /alongside embarking on doctoral study, especially in the case when border-crossings between disciplines is noted, and where candidates may not possess sufficient in-depth expertise in foundational disciplinary fields. However, unlike the context in the United States where taught doctoral programs are more accepted, the recent declaration of European

Rectors' Conferences² (Myklebust, 2015) has emphasised the independent research agenda of the doctoral study process without a formal, compulsory taught program with specified credits. Katrien Maes, chief policy officer of the League of European Research Universities commented as follows:

...the design of doctoral education must remain clearly distinct from that of the first and second cycles of higher education in the Bologna Process. ... Research-based PhD training, which requires a careful balancing of educational and research perspectives, is fundamentally different from the preceding educational cycles. It would be unwise to create uniform, top-down, regulatory processes, such as credit ranges for the research-based PhD, or to regulate the status of doctoral candidates as students or employees. (Myklebust, 2015, p.2)

This caution is suggested in order to promote the transdisciplinary nature of doctoral studies, where students and supervisors are provided the latitude to choose appropriate input to support their study, some of which may involve engagement with taught courses/modules, but which should not be specified in a pre-deterministic fashion since the topics of their studies, their uniqueness should inform the curricular decisions. The concern of the normative commodification of the doctoral curricula and a vocationally-led, job-market orientation also underpin this comment. The above suggests the importance of creating enabling conditions for flexible choices in the kinds of decisions that doctoral candidates choose to support their particular studies, based also on the unique academic biographies of the students with respect to their topics and the conception of what is the doctorate for and the kind of doctoral study that the candidate is pursuing.

Table 1. Differences between the PhD and the Professional Practice Doctorate

Primary characteristics	PhD	Professional practice doctorate (PPD)
Aim	To develop longer term THEORETICAL insight	To generate more short term/ immediate PRACTICAL operations
Direction	To improve a more universal PHILOSOPHICAL problem/s	Aim to resolve a more localized PRAGMATIC problem/s
Driving force	Driven by the world of academia	Driven by the world of work
Implications	The development of a theory	A set of recommended interventions
Orientation	ABSTRACT/ CONCEPTUAL	PROFESSIONAL/ VOCATIONAL

Table 1 suggests that institutions could choose to offer exclusively one or both types of doctoral studies depending on how they envisage their use value. In traditional universities the emphasis has been on the generation of abstract knowledge that may have implications for the world of practice, but that this is not its primary aim. Increasingly as former institutions which were largely vocationally-

² The presidents who signed this joint declaration were from the following organisations: the Conference of the Directors of the French Engineering Schools, The French Conference of University Presidents, the Conference of Rectors of Academic Schools in Poland, the German Rectors' Conference, the Rectors' Conference of Swiss Universities, Universities UK, and the Hungarian Rectors' Conference.

directed *e.g.* the polytechnics in the United Kingdom; or the Institutes of Technology, technikons in South Africa, embrace an agenda of research *for* practice. The awarding of a qualification above that of a Masters level has come to shape the decision to award professional doctorates. This doctorate is increasingly understood as making a valuable form of knowledge contribution to the world of work and is increasingly valued and sponsored by many professions such as engineering, science, agriculture, business and/or law. In South Africa this has been resisted by those institutions that wish to carve up the abstract philosophical conception of a PhD even though the official Higher Education legislation of the country permits both types to be offered by an institution. The choice is often linked to prejudicial conceptions across historical divides of former more vocationally-driven and academically-driven institutions.

As the unemployment concerns of qualified doctoral graduates escalates in particular contexts, the practical value of the professional doctorate is increasingly gaining currency, especially from the world of work where companies are increasingly seeing the value of a doctoral graduate who can “hit the ground running” to offer service to the company, rather than the abstract theoretically orientated PhD graduate who has to be inducted into the world of work. Zusman (2015) comments about the phenomenal growth in the professional practice doctorate in the United States:

(Professional) programs...skyrocketed from nearly zero a decade ago to more than 500 programs in at least a dozen fields today, with over 10 000 degrees awarded just in 2012. For example, doctor of nursing practice programs increased from just two in 2002 to 217 in 2012; nearly 100 more programs are in the planning stage. (Zusman, 2015, p.1)

This growth is said to be responsive to the specific needs driven by the increasing complexification of the workplace; the rapid expansion of technological interventions to support practice; and the rapidly changing and expanding knowledge environment. Some may therefore argue that the PhD is a relevant form for the preparation of the new generation of academics while the professional doctorate is directed toward resolving practical concerns in the world of work. It is worth noting that the MIE has chosen both forms of the doctorate to serve different functions for its resident staff. The partnership program with the University of Brighton offers a professional doctorate and the UKZN linkage is directed towards a PhD. Both serve different value for doctoral students and the context of the MIE. The value of Table 2 by Matos (2013) is that it suggests that the normative comparisons that are often used in evaluating and monitoring higher education fail to recognize the different kinds of trajectories of experiences of different types of doctoral students in different fields. The differences across the tables suggest that there are largely different paradigmatic worldviews in operation across these two typologies and that the length of engagement, duration and expense of conducting such studies in each discipline might vary significantly. This table explains the differences in research aggregate outputs of the different groups of Natural and Social Sciences institutionally. It is prudent therefore to be less normative and judgmental when assessing the research output and productivity of these different fields of higher education. Tables 1 and 2 suggest

that the hallmarks of a quality doctoral study cannot be universally determined and measured using the same indices. How this will affect future funding, access and output interpretations is thus relevant. The next section explores in-depth the kind of doctoral choices made in designing a doctoral programme for UKZN which later was drawn on to form the basis for the design of the partnership program with the MIE.

Table 2. Differences between PhDs in Social Sciences and in the Natural Sciences

	PhD in the Social Sciences	PhD in Natural Sciences
Scope of the thesis	Student responsible for whole research project	Student responsible for a part of a wider research project
Topic of the thesis	Student's own	Part of a wider research project and selected/assigned by the supervisor/principal investigator
Results	Only positive results accepted	Negative results accepted
Proximity to supervisor	Meeting by arrangement	Constant presence of supervisor
Location	Student rarely has own space provided by department/university. Many students work from home	In the lab
Proximity to other researchers	Lonely endeavor	Close to other researchers in same lab
Funding	Student has to apply individually for funding	Attributed to student as part of the overall funding for supervisor's project
Duration of doctoral programme	Rarely within 4 years	Stricter time limit – due to way funding is organized
Facilities	Usually none	Lab, computing facilities, desk

Source: Matos (2013, p.631)

Designing a doctoral program to highlight social relevance: *The UKZN-MIE doctoral cohort model*

It is not the intention of this section to provide an in-depth historical trajectory to the design and implementation of the UKZN-MIE linkage program around doctoral education. This is captured elsewhere (Samuel & Mariaye, 2014). Suffice to say that the program was underpinned by a conscious effort not to perpetuate patterns of colonial expansion of the educational models from the powerhouses to the margins. A key underpinning principle was “mutual reciprocity” accruing benefits to both collaborating parties. However, this does not mean that the patterns of hierarchy between the larger continental African economic powerhouse of South Africa and the relatively geographically smaller Mauritius did not feature in the setting up and delivery of the program. The differentials were inbuilt into the partners' histories, for example, MIE not being a degree-awarding

institution and UKZN having a relatively long history of such. The relatively more accessible human, physical, and financial resources for higher education, libraries, staff qualifications, and diversity of educational programs, also placed UKZN at an advantage. The pattern of advantage is however, not uni-directional. Mauritius had already fifty years of post-independence experience of negotiating its positionality internationally. It had also, due to its relatively smaller scale, a conscious infiltration of curriculum reform and teacher professional development into many levels of the education system led by state and higher education agendas. Its relative success continentally as a stable democracy, consistently for six consecutive years rated first among fifty-three countries in the Mo Ibrahim Index of African Governance (IIAG) 2012, has earned it a model state status. Its higher middle income country status, its stable economic and educational achievements in internationally benchmark test scoring have earned it a significant reputation. Its linkages within the regional countries is cordial and interactive. However, this stability is itself that which came to be questioned during the course of the doctoral partnership, something which may arguably be seen as the unintended, but potentially “dangerous” consequences of the use of values, principles and designs from outside one’s borders (Mariaye, Varma & Naëck, 2014). The over-reliance of theoretical insight and modelling from abroad is part of the nation’s culture of importing many of its leavening resources.

The patterns of the UKZN doctoral cohort model discussed below are what attracted the managers of the programs of study at both partnerships institutions to exchange possibilities of a program where UKZN who awarded the degree delivered on-site supervision at the Mauritius MIE campus. Rather than students traversing to the degree-awarding site of the university, teams of UKZN supervisors oversaw the development of the doctoral candidates in situ. This proved to be a cost-effective model for the Mauritian students, further supported by the subsidized rating afforded to citizens of Mauritius as part of the Southern African Development Community (SADC) Protocol which afforded them local SA rather than international tuition and study rates. The program memorandum of understanding expects students to spend at least a three-month period at the UKZN site as a way of accessing physically the resources of the university. The doctoral program presently (2015) consists of thirty-six students, at different stages of their thesis development, undertaking a range of topics in the educational sphere. The program was first mooted as both a student and staff supervisors’ development exercise. Many of the initial doctoral students were staff of the MIE but their peers, the MIE supervisory staff who were to serve as co-supervisors, although qualified doctoral graduates, lacked personal doctoral supervision experience.

For the student the program entails a communal peer-reviewed cohort assemblage, six times a year for defending their work-in-progress reports and planning for future direction of their studies. The cohort consists of all students, a team of UKZN and MIE co-supervisors communally reviewing the planning, reflecting and organising around doctoral studies. The “head work,” the development of a proposal to be defended, “field work,” data production, and “text work,” thesis report production, constitutes the three interlocking phases of the doctoral program. The program is further supported

by an appointed supervisor team which consists of at least one staff member from UKZN and one from MIE. This supervision happens largely through electronic media: emails, Skype, oral communication. Each of the six annual seminars spans a three-day session where all assembled students are supervised in community. Both oral presentation skills akin to conference presentations are being honed, and written textual competences in reading and writing are part of the doctoral cohort weekend. The diagram below captures the range of activities existing in parallel alongside the program. It should be emphasized that the program is generated responsively to the specific stages of development and the requested inputs from the students who co-design the delivery of the program. It is not a formally “taught” program.

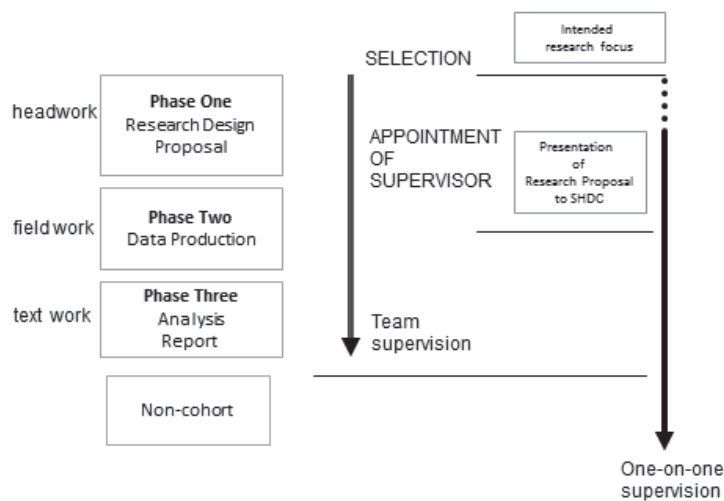


Figure 1. The doctoral cohort supervision model

In reflecting on the research learning processes that characterize this model of doctoral supervision, Samuel and Vithal (2011) argue that it is built on the power of inter-disciplinary dialogue, drawing supervisors and students from a diverse range of disciplinary backgrounds and methodological expertise. The training program is not simply restricted to the completion of the individual students’ own thesis, but also provides insight into a range of paradigmatic and methodological positions. Students and supervisors experience decision-making surrounding research as a contested space, based on particular vantages and positionalities of the researchers: epistemologically, contextually, and methodologically. Although perhaps initially overwhelming, students and supervisors soon embrace the process of research learning as an ever-widening set of choices and opportunities, each of which has to be justified, defended and interrogated. This indeed constitutes broad teaching and learning about research. The curriculum “content”, so to speak, is generated directly from the specific topics and methodologies embraced by the students. Rather than a simplistic cloning of methodologies or perspectives of the Master Supervisor, the student has a

broader forum to discuss potential research design, analysis and reporting strategies.

Further principles of *Ubuntu*, serendipity and democracy are said to be the philosophical rationales which have come to reside within the program. The *Ubuntu* principle refers to an African philosophy which suggests that “I am because of you”, highlighting the need for interactive contestation and dialogue to produce conceptions of one’s believed convictions. It is a contested space which is girded by deep respect for the singular choices made by individuals, but who are cognizant that one cannot live in idealistic isolation of a communal and contextual setting. Culture, context, and communality are intersecting features of this principle. Nevertheless the program is deliberately designed to create opportunities for disruption, for varied vantage points to be shared. It is not entirely predictable from where the sources of inspiration for one’s chosen methodology, positionality or perspective for the research study might emanate, hence our labelling of the principle as being one of “serendipity”. As part of the process of educational enterprise contributing to the realization of better social justice, the principle of democracy underpins the delivery of the doctoral program. As discussed above, it is understood that absolute equality of position is not always possible, but the intentionality of the program is to create sufficient spaces for the development of values of equity and respect from varied vantages. This democratic ideal is a key feature which the South African higher education partner fought for throughout its campaign for dismantling the apartheid system and it continues to resonate in its curriculum design choices for doctoral education.

What makes the model work?

The model draws a strong pedagogical research learning agenda which assumes that the doctoral students drive the curriculum. This is reinforced in seminar sessions being chaired by the students themselves. Ownership of teaching and learning resides in all collaborating partners, students and supervisors, UKZN and MIE staff. The program is held together not only by the belief that the end point of a doctoral program is not simply to produce a product of a written thesis for international examination, but also is to produce a researcher who is able to compete worldwide with a wide variety of insights into epistemological, methodological and contextual insight. Their chosen field of study qualifies them as an expert of only a small area of the body of knowledge which will need to be further activated through further research, conferencing and dissemination strategies after doctoral study. The program also encourages students themselves to choose their topics in relation to the specificities of their own contexts, rather than simply the choice being driven by the Master supervisors or the simplistic importing of external frameworks. This adds a dimension of personal commitment to the project. Of course the degree of influence of powerful supervisors cannot be sanitized out of these decision-making processes, but it is a chosen strategy that students make with conscious understanding of their own options. The balance of having both a local and an international supervisor adds multiple vantages further enriching the study. Moreover, an econometric understanding of why this

UKZN-MIE model is a popular choice for doctoral studies is its affordability. Given the high fee structures of other international partners the South-South collaboration offered by this model within the SADC protocol allows for subsidization of costs.

The future of the doctoral studies

The ultimate success of the UKZN-MIE program will be when the Mauritian institute is given latitude to become self-degree-awarding for doctoral programs. This will entail confidence of the Mauritian government that the MIE has indeed the capacity to oversee doctoral education. As a member of UKZN this would be a hallmark of success of our contribution to developing capacity across the African continent in awarding doctoral education degrees. However, this does not mean that the partnership of collaboration will cease to exist at this “independence” severance. The program has already spun off a set of relational research endeavors beyond simply the awarding of doctoral education. Collaborating supervisors are finding common areas of comparative research agendas; shared exchanges across the institutions are increasingly becoming commonplace as researchers share their worldviews in both South African and Mauritian conferences. This generates value for collaborative research projects which will outlive the doctoral program. This is a research capacity building success that spans not only staff, but students as well, many of whom are staff members of the MIE. This can only have the long term consequence of raising the profile of a small island state in partnership with established universities internationally. Already the MIE is entering into other collaborative partnerships of different curricula models and delivery strategies with other international partners. This confidence is part of their embracing their standing as a maker rather than simply a taker of academic knowledge.

Concluding remarks: Hallmarks of a successful doctoral studies program

A successful doctoral studies program can be characterized by many features. It should always be located within the specific needs of the collaborating partners both at the local and international levels. It should be clear in its goals as to what it expects its graduates to be, do, and become. It should be able to unambiguously clarify the purpose that it intends to contribute to in relation to the specific social, economic, political, and cultural systems within which it resides. All doctoral programs cannot achieve the same purposes, and this clarification of form, structure, and delivery should be made in relation to the expectations of what contributions are required from the graduates. Moreover, doctoral study should be a willing free choice of subject, topic, methodology, and purpose of the students aligned with the respect for the values of others who have traversed this direction previously. However, disruption rather than habituation to the norms of academic conventions should be a characteristic hallmark. The successful doctoral program is reliant on a confident and transparent

agenda of supervisors, managers, designers, and sponsors of the program. When doctoral students know why they are doing what they are doing, and how they have come to make their choices, they are likely to become productive contributors to the development of the social, political, educational and cultural contexts. No less should be expected of this highest form of educational endeavor.

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