RESEARCH AGENDA

2017-2020

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Version 02 May 2017

higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

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ACRONYMS

AET	Adult Education and Training
BRICS	Brazil, Russia, India, China and South Africa
CET	Community Education and Training
CSI	Corporate Social Investment
DHET	Department of Higher Education and Training
DOL	Department of Labour
HEI	Higher Education Institution
ICT	Information and Communications Technology
NIHSS	National Institute of Human and Social Sciences
NDP	National Development Plan
NQF	National Qualifications Framework
NSF	National Skills Fund
NSFAS	National Student Financial Aid Scheme
OFO	Organising Framework for Occupations
PSET	Post-School Education and Training
SAQA	South African Qualifications Authority
SDGs	Sustainable Development Goals
SETA	Sector Education and Training Authority
TVET	Technical and Vocational Education and Training
WBL	Workplace-Based learning

1. INTRODUCTION

The Department of Higher Education and Training (DHET) was established in May 2009 to administer and manage post-school education and training in South Africa. The Post-School Education and Training (PSET) System comprises all education and training provisioning for those who have completed school, those who did not complete basic schooling, and those who never attended school (DHET, 2013).

Considerable progress has been made since 2009 in drawing together the various threads in the Department. The Department is now responsible for the following:

- 26 public universities (as at 2016);
- 50 public Technical and Vocational Education and Training (TVET) colleges;
- 9 Community Colleges, with over 2 000 Community Learning Centres;
- Private Colleges and private Higher Education Institutions (HEIs);
- The Sector Education and Training Authorities (SETAs) and the National Skills Fund (NSF);
- Regulatory bodies responsible for qualifications and quality assurance in the post-school system – the South African Qualifications Authority (SAQA) and the Quality Councils;
- The National Student Financial Aid Scheme (NSFAS), and
- The National Institute of Human and Social Sciences (NIHSS).

In addition, the Department is responsible for ensuring that qualifications offered by education and training institutions that are located in other government departments, such as Nursing Colleges, are quality assured by the relevant quality assurance bodies established by the Minister of Higher Education and Training.

The vision of the PSET system is reflected in the *White Paper for Post-School Education and Training* (DHET, 2013). It encapsulates goals such as: expanded access to PSET; improved quality of PSET; increased diversity of PSET provisioning; a stronger and a more cooperative relationship between the PSET system and the world of work, and a PSET system that is responsive to the needs of individual citizens and employers in both public and private sectors, as well as to broader societal and developmental objectives.

2. IMPORTANCE OF RESEARCH

Research is key to the realisation of the vision outlined in the *White Paper for Post-School Education and Training*. It can provide insights into the PSET system and the constituencies it serves, in particular,

the success or otherwise of policies and their implementation; and provide information and analyses about the experiences of other countries with similar challenges. It also enables practitioners to test and compare diverse theories and approaches to the provision of PSET as well as the development of leading-edge information, services and applications for the system. Most importantly, research can make available the evidence on which the Department is able to make decisions, review policy and improve upon the system, both in policy and in practice.

The Department wishes to ensure that a significant volume of high quality research engages with and contributes to the government's goal of reducing occupational shortages in the country, especially in priority and scarce skills areas; improving low participation rates in the post-school system; correcting distortions in the shape, size and distribution of access to PSET; providing exemplars of good practice and improving the quality and efficiency in the system, its sub-systems and its institutions.

In acknowledging the value of research, the *National Development Plan* (The Presidency, 2011) emphasises the advantage of using new modes of knowledge production, economies of scale and opportunities presented by working across knowledge disciplines.

3. PURPOSE OF THE RESEARCH AGENDA

The Research Agenda sets out the research needs of the Department for the period 2017 to 2020. It has been developed to support research planning in the Department, and to signal to stakeholders the areas of research that the Department has identified as being important.

More specifically, the Research Agenda has been developed to: (a) inform planning and implementation processes within the Department; (b) inform stakeholders of the Department's research priorities; (c) signal to funders and development partners what research areas require investment, and (d) assist the Department to guide resource allocation for research. It is hoped that the research agenda will be used by researchers, research organisations and post-graduate students to inform their research planning.

4. CONCEPT OF RESEARCH

For the purposes of the Research Agenda, the term "research" is taken to mean rigorous and systematic enquiry and analysis. Such research may be empirical or theoretical, quantitative or qualitative applied or basic. It may involve the critique of policy; in-depth analysis of regularly compiled data sets and explanations of trends; observations; case studies and other research

investigations, or meta-reviews and analyses. Rigorous evaluation studies of educational and training programmes or interventions, including cost-benefit analyses and impact studies, fall under the research umbrella, as do high level analyses of statistical data.

5. RESEARCH-POLICY NEXUS

As is generally acknowledged, the nexus between policy, research and practice is not linear - it is undeniably, highly complex. It is an important subject of research in its own right. Inquiry into how relevant new knowledge is generated, disseminated and taken up by decision-makers and practitioners needs to be problematised and investigated.

The Department is of the view that research cannot be expected to serve only current policy purposes or applications. Often the influence of research on policy and practice is indirect, long-term or difficult to discern. Nevertheless, such research may make a valuable contribution to our knowledge and understanding of PSET in South Africa. The scope of the education Research Agenda is therefore broad, even as the Department selects certain areas and topics for priority attention.

Researchers, public servants, social partners, business, industry and education and training practitioners are all working to ensure that all South Africans have access to and succeed in a high quality and relevant PSET, in order to fulfil the economic and social goals of participation in an inclusive economy and society. It is therefore acknowledged, that knowledge flows among them along multiple channels, not just one way. Education institutions, business, the research community and education and training practitioners need to converse on such questions such as how evidence from research may be best communicated to policy makers, how good practice can be shared and how research can contribute to strengthened communities of practice.

6. THE DEPARTMENT OF HIGHER EDUCATION AND TRAINING AND THE RESEARCH COMMUNITY

South African researchers are part of local, regional and global research communities, contributing to new knowledge and advice, as well as participating critically in the South African, regional and international research conversation.

The Department will engage professionally with the research community to convey its priority interests; improve its own knowledge base; support mutually productive research partnerships with local, regional and international research bodies; enhance its own capacity to manage, conduct,

interpret, disseminate and apply research; and (so far as is practically possible) test and modify its policy ideas against appropriate research evidence.

The *White Paper for Post-School Education and Training* articulates that collaborative research projects with other countries carry significant benefits and will be encouraged, in particular, research partnerships involving African countries and other developing countries, including Brazil, Russia, India and China (BRICS countries).

South Africa's tradition of critical policy research is an excellent foundation for current and future relationships between the Department and the research community. The Department expects researchers to engage robustly with departmental policies and programmes both as participants and as critics. Research partnerships between the Department and researchers create no obligations on either side since each must play its own role with integrity and respect for the other's autonomy.

7. FOCUS AREAS OF RESEARCH

The Research Agenda comprises nine focus areas pertaining to PSET that have been derived *inter alia* from the *White Paper for Post-School Education and Training* and the Department's key policy imperatives.

The themes/topics under each focus area are complementary and not exhaustive. They vary in scale and complexity according to their subject-matter, and some require more than one study. The theme/topic descriptors are meant to be indicative. In order to become operational, each theme/topic will require a fully-worked research proposal. Whether or not a project becomes operational will depend on a variety of factors, not least the availability of resources and research partners.

It is understood that both financial and human resources are limited and choices have to be made by both the Department and research organisations. It is therefore particularly important to build synergies and research partnerships in order to conserve resources, focus on agreed priorities and maximise research impact. Consultation, networking and information-sharing will help decision-makers to focus on what is both important and do-able.

Each focus area could generate an indefinite number of themes and topics, and many cross-theme permutations are possible. The Department has, however, identified specific themes and topics that are of particular priority for its needs, for the next three years.

The following broad focus areas are particularly important to the Department. The focus areas are inter-related. They are not in order of precedence and are not an exclusive list.

a) Access to PSET

The NDP has set enrolment targets to radically increase participation in HEIs and TVET colleges and it is therefore crucial to address barriers to access and to seek innovative ways to expand access. In addition, equity is a serious dimension of access and it is therefore crucial to ensure that previously disadvantaged individuals, including persons with disabilities, those who live in rural areas and those in financial need, have improved access to PSET opportunities.

Key Themes/Topics on Access to PSET

Priority:
1. Barriers and enablers for access to PSET (including free education and student accommodation.
2. Funding modalities for public and private PSET institutions.
3. Implications of the National Development Plan (NDP) enrolment targets for funding, infrastructure, equipment, human resources etc.Challenges regarding the decreasing proportion of male students at universities.

Other:

4. The role of distance education, open learning and on-line learning in improving access to PSET.
5. Cross-border distance education programmes.
6. Access to PSET by students with disabilities.
7. Articulation between and within PSET institutions.

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b) Quality and Efficiency

The NDP draws attention to the unacceptably high proportion of first-time entrants who drop out of TVET colleges and universities in their first year, as well as the poor student graduation and pass rates. It points to the unsustainable high costs of producing graduates in South Africa which lead to a massive wastage of much-needed resources in the country and result in gross inefficiencies in the system. It indicates further that a short-to-medium strategy to counter low throughput rates is for the PSET system to compensate for the poor education background that new entrants bring with them through special programmes such as foundational programmes, bridging programmes and remedial programmes.

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Key Themes/Topics on Quality and Efficiency

Priority:

1. The quality of university and TVET college graduates.
2. Social attitudes of TVET College and University Graduates, especially in relationship to citizenship.
3. Models of good-practice teaching and learning, academic support, mentoring programmes, and pedagogical approaches.
4. The role of practical work and simulated learning in promoting student success.
5. How efficient is the PSET system: Examining the reasons for and effects of dropout, repetition and low throughput in the PSET system.

Other:

6. Local and international perspectives and perceptions of the quality of higher education graduates.
7. Career development services in the PSET system.
8. Skills levels of matriculants and their preparedness for PSET.
9. Provision of nutritious food at no extra costs at student residences.
10. Strategies used by students to overcome socio-economic and other challenges.

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c) Education and Work

Technical and vocational education and training, which has a strong workplace learning component, requires partnership arrangements between government departments, education institutions, employer bodies, trade unions, industry and SETAs. Partnerships will assist PSET institutions to locate opportunities for Workplace-Based Learning (WBL), to place students when they complete their studies, and to obtain regular workplace exposure for staff so as to keep them abreast of developments in industry. Employers should also be in a position to advise the college system and individual colleges on curriculum, programme and qualifications issues, and experts from industry could teach at colleges on a part-time or occasional basis.

According to the *White Paper for Post-School Education and Training*, the South African PSET system suffers from negative reputation problems which are compounded by limited post-labour market prospects for graduates from both public TVET colleges as well as universities. This is partly due to weak 'systemic' relationship between the state, the education and training provider system and the main economic actors, the employers.

Despite the relatively high levels of funding available through the Skills Levy Grant system, limited opportunity for workplace training and experience remains a significant challenge in the system. Regrettably, a significant proportion of money spent by SETAs on learning programs, are not linked to education programmes provided by public TVET colleges and universities. Furthermore, the *White*

Paper on Post-School Education and Training indicates that while there are pockets of success within the SETA sub-sector, in the main, the training facilitated by SETAs does not generally meet the skills needs of the economy and does not improve the employability of trainees.

> **Key Themes/Topics on Education and Work**
>
> *Priority:*
> 1. The extent, nature and character of WBL.
> 2. The effectiveness of learnerships, internships and apprenticeships.
> 3. Responsiveness of TVET colleges and HEIs to the social and economic needs of society.
> 4. The impact of PSET on poverty, equity and employment.
>
> *Other:*
>
> 5. Barriers, constraints and enablers for WBL.
> 6. Models of effective work-place based training.
> 7. Quality assurance of work-placed based programmes.
> 8. Epistemologies and pedagogies of WBL in comparison to institutional learning.
> 9. Impact of SETAs (cost-benefit analysis).
> 10. The effectiveness/impact of WBL skills programmes.
> 11. Education, society and work, in the context of a developmental state.
> 12. Workplace exposure for lecturers.
> 13. Skills for Sustainable Livelihoods.
> 14. Community Education and the world of work.

d) Skills Planning: Analysis of Skills Needs

The *White Paper for Post-School Education and Training* asserts that "if the provision of education and training is to be better coordinated with the needs of society and the economy, central information about skills needs is required". It emphasises that "identifying current and future skills demand as accurately as possible is extremely important if the goals of the NDP, the New Growth Path and the Industrial Policy Action Plan are to be achieved". The National Skills Development Strategy III also draws attention for the need to determine skills supply, shortages and vacancies.

The *White Paper for Post-School Education and Training* commits the Department to establishing a Skills Planning unit to undertake the function of "central skills planning". The Department will establish a planning unit that will work with key public institutions such as universities and other research institutions, to develop an institutional mechanism for skills planning. The planned institutional mechanism will become a repository of labour market information, will develop skills demand forecasting models, and will promote and build labour market research and analysis skills for the country. The Skills Planning unit will aim to ensure that a coherent set of data is collected – from SETAs, Departmental and other sources – that can be used for the analysis.

e) Governance and Management

The effective governance and management of TVET colleges and HEIs is critical to effective service delivery. According to the *White Paper for Post-school Education and Training*, one of the unusual aspects of higher education governance in particular, is that the accountability pathway is not always clear. In part, this is because of the unique autonomous status of HEIs. On the one hand, universities are funded in large parts by the state and are expected to respond positively to government policy directives, and on the other, HEIs are held accountable for the success of their own organisation. Strengthened governance and management will contribute to both universities and TVET colleges being robust institutions capable of delivering on their mandate.

> **Key Themes/Topics on Governance and Management**
>
> *Priority:*
> 1. Strengthening the governance and management of HEIs/TVET colleges/Community Colleges and SETAS.
>
> *Other:*
>
> 2. The role of employers in governance structures of TVET Colleges and HEIs.
> 3. Alternative forms of governance and management of HEIs/TVET colleges.
> 4. Capacity building programmes for senior managers and council members.
> 5. Systems and organisational development.

f) Staffing at Post-School Education and Training Institutions

The quality of teaching/lecturing staff is undoubtedly a critical element of effective student learning. The availability of opportunities for professional development is crucial to ensuring high standards of teaching and lecturing at TVET colleges and HEIs.

According to the *White Paper for Post-school Education and Training*, almost 50% of professors and associate professors are due to retire in the next decade. The concern is that there are insufficient numbers in the existing academic and postgraduate pipelines to replace them. There is a shortage of academics, especially in certain fields and at particular universities. Composition of staff is still racially skewed, with white male academics dominating key areas of university and academic life, especially at the historically white universities. There is a need to increase the proportion of staff with post-graduate qualifications, especially PhDs at universities, and to meet the increasing demand for professional post-graduates in the non-university research, financial and services sectors. We also have to ensure that as the TVET college sector expands, it will need appropriately qualified and competent teaching staff to respond to burgeoning student enrolments.

Mentoring and support to junior lecturers at both HEIs and TVET colleges are crucial interventions to improve quality of teaching and learning at these institutions.

In addition to academic staff, there is a need to examine the state of managerial and support staff at PSET institutions. The absence of readily availability of high- level and experienced managers is a matter of concern, and so too are levels of support staff, such as Information Technology specialists.

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Key Themes/Topics on Staffing at Post-School Education and Training Institutions

Priority:
1. Current and projected staffing needs of public TVET colleges and public HEIs.
2. The experiences of teaching staff (lecturers) and the methods they use to engage their students.

Other:

3. Analysis of qualifications of lecturing staff in the PSET system.
4. Making TVET colleges and public HEIs attractive to good lecturers and students.
5. Empowering Community Education and Training (CET) lecturers.
6. Attracting young people to the academia.
7. Conditions of employment of staff in public HEIs and TVET colleges.
8. Evaluation of support programmes to junior lecturers.

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g) Curriculum, Programmes and Qualifications

The *White Paper for Post-School Education and Training* asserts that the curriculum offered by PSET institutions should promote critical thinking, be relevant and respond to the changing national and global environment, rapid changes in technology, changes in demographics, and should promote the ideas reflected in the Bill of Rights of the South African Constitution. The PSET system should support institutions that develop academic programmes that prepare students for a role in a democratic, non-racial and non-sexist South Africa.

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Key Themes/Topics on Curriculum, Programmes and Qualifications

Priority:
1. Development and provisioning of African Languages.
2. Processes followed in developing curricula in PSET institutions.
3. Decolonisation and strengthening of African-centred curricula.
4. Review of vocational programmes and qualifications in TVET colleges.
5. Information and Communication Technology (ICT) integration in teaching and learning and teacher capacity to use new teaching methods.
6. Curriculum and programme responsiveness to economic and development needs.

Other:

7. Implicit and explicit values embedded in programmes offered at Universities, TVET Colleges and Community Colleges, particularly in relation to the Sustainable Development Goals (SDGs).
8. Processes followed in developing qualifications in PSET institutions.
9. The state of Adult Education and Training (AET) Centres located in HEIs.
10. Evaluation of distance education programmes at TVET and Community Colleges.
11. Profile of programmes and qualifications offered at private TVET colleges.
12. Exploration of new curriculum development initiatives.

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h) The National Qualifications Framework, Quality Councils and Articulation

The PSET system needs to be diverse and differentiated, yet coherent. There is a need for articulation and mobility between general, vocational, higher and adult education and training and the workplace, with multiple entry and exit options.

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Key Themes/Topics on the National Qualification Framework, Quality Councils and Articulation
Priority:
1. The quality assurance system for public and private PSET institutions.
2. Evaluating the implementation of the National Qualifications Framework (NQF) Act.
3. Pathways of students within the PSET system.

Other:
4. Articulation between HEIs and other post-school institutions.
5. Recognition of prior learning.
6. Differentiation in the PSET system.
7. Accreditation and regulation of cross-border programmes.

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i) Cross-Cutting and Other Issues

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Cross-Cutting and Other key themes/topics
Priority:
1. The size and shape of private PSET.
2. Evaluation of key policies in the PSET system and system reviews.
3. Transformation in Higher Education.

Other:
4. Provision of Education and Training at state owned entities and other government departments (for example, Correctional Services, the South African National Defence Force, Department of Health).
5. Research and innovation in HEIs (including funding).
6. Relationship between equity of access and equity of outcomes.
7. Cost benefit analysis of the different components of PSET.
8.
9. Radical Planning (How do we plan radically for the PSET System? What constitutes radical planning? How effective are current planning processes? What is the relationship between radical planning and Monitoring and Evaluation?).

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Note: A list of Research Priorities is attached as Appendix 1.

8. RESEARCH FUNDING AND PROCUREMENT

There is wide scope for partnerships in research projects between the Department and research organisations or institutions — whether local, regional or international—that have a direct interest in advancing access, equity, quality and efficiency of PSET. The Department will initiate such partnerships and will welcome proposals from prospective partners.

The Department is not in a position to fund all of the research that is in the Research Agenda. The Department therefore welcomes investment by research councils, universities, foundations, development agencies and other bodies in any of the areas listed in this Research Agenda.

The Department will provide letters of support for research proposals submitted by researchers and research organisations to local and international organisations, if it is in accordance with its Research Agenda (upon request). A strong case can be made for Corporate Social Investment (CSI) in building research capacity, and also in long-term research projects which address fundamental questions about the PSET system.

The Department's procurement practice is governed by the Public Finance Management Act, 1999 (Act 1 of 1999) and Treasury Regulations. Therefore, procurement decisions on research provision will combine considerations of cost, functionality and quality. The Department will ensure that its research procurement processes are informed by the advice of credible evaluators.

The Department intends to fund research within the scope of its own financial resources, as follows:

a) **Commissioned research**. Research topics, whose terms of reference are specified by the Department as part of this agenda, will be commissioned and funded by the Department.
b) **Calls for proposals**. Applications by external researchers for funding to undertake projects on topics in this agenda will be invited on the basis of a Department proforma. Approved applications will be funded by the Department.

9. CONCLUSION

The Department has a vital interest in the production, management, dissemination and utilisation of knowledge that will help to enhance the quality, quantity and diversity of PSET in South Africa.

This document relates the Department's interests to the broader interests of the research community; positions the Department as an active contributor to that community; helps sharpen the focus and improve the quality and effectiveness of departmentally driven research; and describes the

instruments the Department will use to accomplish its research tasks in collaboration the research community at large.

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1. **Key Themes/Topics on Access to PSET**
1.1. Barriers and enablers for access to PSET (including free education and student accommodation.
1.2. Funding modalities for public and private PSET institutions.
1.3. Implications of the National Development Plan (NDP) enrolment targets for funding, infrastructure, equipment, human resources etc.

2. **Key Themes/Topics on Quality and Efficiency**
2.1. The quality of university and TVET college graduates.
2.2. Social attitudes of TVET College and University Graduates, especially in relationship to citizenship.
2.3. Models of good-practice teaching and learning, academic support, mentoring programmes, and pedagogical approaches.
2.4. The role of practical work and simulated learning in promoting student success.
2.5. How efficient is the PSET system: Examining the reasons for and effects of dropout, repetition and low throughput in the PSET system.

3. **Key Themes/Topics on Education and Work**
3.1. The extent, nature and character of WBL.
3.2. The effectiveness of learnerships, internships and apprenticeships.
3.3. Responsiveness of TVET colleges and HEIs to the social and economic needs of society.
3.4. The impact of PSET on poverty, equity and employment.

4. **Key Themes/Topics on Analysis of Skills Needs**
4.1. Skills supply and demand, and the imbalances between these.
4.2. Forecasting skills needs.
4.3. Panel and longitudinal studies on graduate destinations.
4.4. Identification of occupations in high demand and skills gaps.

5. **Key Themes/Topics on Governance and Management**
5.1. Strengthening the governance and management of HEIs/TVET colleges/Community Colleges and SETAS.

6. **Key Themes/Topics on Staffing at Post-School Education and Training Institutions**
6.1. Current and projected staffing needs of public TVET colleges and public HEIs.

7. **Key Themes/Topics on Curriculum Programmes and Qualifications**
7.1. Development and provisioning of African Languages.
7.2. Processes followed in developing qualifications in PSET institutions.
7.3. Processes followed in developing curricula in PSET institutions.
7.4. Decolonisation and strengthening of African-centred curricula.
7.5. Review of vocational programmes and qualifications in TVET colleges.

7.6. Information and Communication Technology (ICT) integration in teaching and learning and teacher capacity to use new teaching methods.

7.7. Curriculum and programme responsiveness to economic and development needs.

8. Key Themes/Topics on National Qualifications Framework, Quality Councils and Articulation

8.1. The quality assurance system for public and private PSET institutions.

8.2. Evaluating the implementation of the National Qualifications Framework (NQF) Act.

8.3. Pathways of students within the PSET system.

9. Cross-Cutting and Other Key themes/topics

9.1. The size and shape of private PSET.

9.2. Evaluation of key policies in the PSET system and system reviews.

9.3. Transformation in Higher Education.