NATIONAL PLAN FOR POST-SCHOOL EDUCATION AND TRAINING 2021-2030



NATIONAL PLAN FOR POST-SCHOOL EDUCATION AND TRAINING **2021–2030**



Published in October 2021

123 Francis Baard Street Private Bag X174, Pretoria, 0001

Telephone: 012 312 5911 Fax: 012 321 6770

ISBN: 978-1-928332-68-8

© Department of Higher Education and Training

Cover image: Department of Higher Education and Training

Designed and typeset by COMPRESS.dsl | 800052 | www.compressdsl.com

CONTENTS

Glossary o	of terms		05
Abbreviat	ions and acron	yms	08
List of tab	les and figures		10
Minister's	foreword		11
Director-G	eneral's forewo	ord	14
Executive	summary		16
Introduction			25
Α.	-	e National Plan for Post-School Education and Training (NPPSET)	26
В.	Principles guid	-	26
С.	Plan developn		27
D.	Situational an	-	27
Ε.		ding an integrated, coordinated, articulated and quality post-school system	31
F.		objectives and outcomes	33
G.	Sector-specific		34
Н.	Structure of th	ne Plan	36
Chanter 1	Developing ar	n integrated, coordinated and articulated PSET system	37
-	Introduction	r integrated, coordinated and articulated F3ET system	38
		nd coordinating	39
1.2	• •	Clear and streamlined roles and responsibilities of all key stakeholders	
	outcome mi	and role players	39
	Outcome 1.2:	Improved capability for integration, coordination and articulation	
		in the PSET system	40
	Outcome 1.3:	A simplified National Qualifications Framework (NQF)	43
		Increased articulation for students between and within the NQF	
		sub-frameworks, and between and within institutions	47
	Outcome 1.5:	Aligned policy and legislation	48
	Expanding the	e PSET system	49
	Introduction		50
2.2	Expanding the	Increased enrolment in all PSET sectors	51 51
		Improved and equitable participation rates	51
		Affordable student fees and accommodation	52
		A sustainable student financial aid system	53
		Strengthened institutional differentiation	53
		Adequate infrastructure to support teaching, learning and research	54
		Sufficient staff to support expansion	55
	Outcome 2.7.		
Chapter 3:	Improving the	responsiveness of the PSET system	56
-	Introduction		57
3.2	Improving res	ponsiveness	58
		A diverse range of qualifications relevant to locality and responsive	
		to community needs	58
	Outcome 3.2:	A diverse range of programmes responsive to the world of work	60
	Outcome 3.3:	A diverse range of mechanisms to improve research, innovation,	
		commercialisation and entrepreneurship in higher education	62
	Outcome 3.4:	Programmes that prepare students for global advances in technology	62

CONTENTS

Chapter 4: Improving relations between education and training institutions and the world of work	63
4.1 Introduction	64
4.2 Linking education and training institutions and the world of work	64
Outcome 4.1: Improved interface between education and training institutions and	
skills levy institutions	65
Outcome 4.2: Improved links between education and training institutions and	
employers for WPBL	66
Outcome 4.3: Improved links between education and training institutions and industry	
to strengthen research and innovation	67
Outcome 4.4: Strong cooperative relations between employers and education and	
training institutions	67
Chapter 5: Improving the quality of PSET provision	68
5.1 Introduction	69
5.2 Improving quality	70
Outcome 5.1: Improved quality of teaching and learning in PSET provider institutions	70
Outcome 5.2: Improved quality of research	72
Outcome 5.3: Well-managed and -governed PSET provider institutions	73
Outcome 5.4: Well-qualified staff in the PSET system	74
Outcome 5.5: Improved quality assurance capability	75
Outcome 5.6: Improved quality of infrastructure	76
Outcome 5.7: Safe and healthy environment for students and staff	77
Chapter 6: Improving the efficiency and success of the PSET system	78
6.1 Introduction	79
6.2 Improving efficiency and success	80
Outcome 6.1: Increased throughput in qualifications	80
Outcome 6.2: Improved exit outcomes related to the world of work	81
Chapter 7: Resourcing and financing the PSET system	82
7.1 Introduction	83
7.2 Key strategies for funding and resourcing the PSET system	84
Chapter 8: Implementation strategy	86
Appendix: Consolidated NPPSET strategies	

GLOSSARY OF TERMS

Access	Availability of opportunities to pursue education and training.
Articulation	The process of forming possibilities of connection within and between the three qualification sub-frameworks across all levels of the National Qualifications Framework (NQF), and within and between learning programmes offered to allow for the vertical, lateral and diagonal movement of students through the formal education and training system and its linkages with the world of work.
Blended learning Structured learning opportunities provided using a combination of con and/or e-learning opportunities to suit different purposes, audiences, a	
Cohort analysis	A longitudinal study of a group of similar students over a specific period.
Effectiveness	A measure of the extent to which an intervention (policy, programme, project) achieves its objectives.
Efficiency	A measure of how well the post-school education and training (PSET) system uses resources to achieve its objectives.
Enrolment planning The process of determining how many students a programme or inst enrol, considering factors such as capacity, infrastructure, cost and de to determine size and shape of institutions, sectors and the system.	
Equity	Fairness in the distribution of educational opportunities, resources or outcomes among enrolled students.
Evaluation Judgement of the performance of planned, ongoing or completed intervent systematic study, addressing issues of causality, and analyses of why intended were or were not achieved.	
Full cost of study	The cost of tuition fees and learning materials, together with approved amounts for living expenses per student.
Headcount enrolment	Unduplicated number of students enrolled and/or registered at a given census date in an academic year, regardless of their course load or number of programmes in which they are registered.
Higher education	Education that generally takes place in public universities and registered private higher education institutions which offer qualifications that meet the requirements of the higher education qualifications sub-framework.
Integrated system	A system whose sectors and components are aligned and work together coherently to enhance learner access to the system, progression within the system and lifelong learning, as well as to enhance system efficiencies and effectiveness.
Lecturer-student ratio	The number of students per academic staff member.
Monitoring	The systematic collection, recording and reporting of information in order to track progress towards the achievement of objectives, and to identify the need for and undertake corrective action.
Non-formal programme	Learning programmes that do not lead to the award of a recognised qualification or part-qualification registered on the NQF.

GLOSSARY OF TERMS

Outcomes	Outcomes are specified in terms of the effects interventions are expected to have on beneficiaries, such as to raise the quality of lecturers or improve the retention of students in the PSET system.		
Outputs	The products, capital goods and services that result from a development intervention, which may also include changes resulting from the intervention that are relevant to the achievement of outcomes.		
Participation rate	The total number of students enrolled in the PSET system, regardless of age, expressed as a percentage of the appropriate age population.		
Post-school education and training institutions	Education and training institutions that include universities, private higher education institutions, technical and vocational education and training (TVET) colleges, private colleges, community education and training (CET) colleges and private skills development providers. These are established, declared or registered by any law assigned to the Minister of Higher Education and Training.		
Postgraduate programme	A purposeful and structured set of learning experiences that leads to a postgraduate qualification that requires an undergraduate qualification for entry, or alternative entry via recognition of prior learning.		
Programme	A purposeful and structured set of learning experiences that leads to a qualification or part-qualification, and may be discipline-based, transdisciplinary, interdisciplinary, multidisciplinary, professional, career-focused, occupational, vocational or general.		
Qualification	A registered national qualification that: consists of a planned combination of learning outcomes with a defined purpose, or purposes, intended to provide qualifying learners with applied competence and a basis for further learning; has been assessed in terms of exit-level outcomes; is registered on the NQF; and is certified and awarded by a recognised body.		
Quality	Meeting the requirements of nationally agreed outcomes and performance/assessment criteria, thus facilitating both provision and monitoring.		
Quality councils	The primary bodies with a direct role in governing quality assurance and certification. Through their responsibility for setting standards, some are also responsible for curriculum development and assessment.		
Redress	Deliberate interventions to overcome disparities in PSET opportunities and performance inherited from South Africa's history of racial, ethnic and gender discrimination.		
Responsiveness	Provision of education and training that is based on the needs of communities, students, employers and the changing world of work (entrepreneurship and employment), i.e. demand-driven supply.		

Sector	Grouping of education and training institutions by objectives and purpose. The PSET sectors are CET colleges, TVET colleges, private colleges and higher education, which includes private and public universities and private skills development providers.
Skills development providers	Education and training providers that currently offer occupational programmes and qualifications that are either accredited or unaccredited. The issue of whether all skills development providers must be accredited and registered, given the need for many types of responsive skills development opportunities, needs to be explored.
Skills levy institutions	Skills levy institutions are the sector education and training authorities (SETAs), the National Skills Authority (NSA) and the National Skills Fund (NSF), which were constituted for implementing the Skills Development Act (SDA).
Success	Refers to the notion of completion. It focuses on the number of students who complete PSET qualifications and programmes (graduates).
Technical and vocational education and training	A continuum of socially and economically necessary and desirable technical knowledge, skills and competencies required to orient and prepare people for work, from low skill to high skill, involving an appropriately varied mix of humane, scientific and technological learning.
Throughput	Completion of a programme or qualification by a cohort. This is evaluated according to the minimum timeframe in which the programme should be completed, as well as other timeframes, including the number of years after the minimum timeframe.
Transformation	In the South African context, transformation relates not only to overcoming apartheid, but also to social change to serve a new social order, meet pressing national needs, respond to new realities and opportunities, and address technological change. For the purposes of this Plan, transformation is about increased and broadened participation, responsiveness to societal interests and needs, cooperation and partnerships, and good governance. The transformation imperatives are outlined in the White Paper for Post-School Education and Training of 2013.
Undergraduate programme	A purposeful and structured set of learning experiences that leads to a first-level qualification in CET, TVET or higher education.
Workplace-based learning	An educational and training approach through which a person internalises knowledge, gains insights, and acquires skills and competencies through experience in a workplace to achieve specific outcomes applicable for employment.

ABBREVIATIONS AND ACRONYMS

4IR	Fourth Industrial Revolution
B-BBEE	Broad-Based Black Economic Empowerment
CAS	Central Applications Service
CDW	Community Development Works
CET	Community Education and Training
CETMIS	Community Education and Training Management Information System
CHE	Council on Higher Education
CLC	Community Learning Centre
DAC	Department of Arts and Culture
DALRRD	Department of Agriculture, Land Reform and Rural Development
DBE	Department of Basic Education
DCDT	Department of Communications and Digital Technologies
DEFF	Department of Environment, Forestry and Fisheries
DEL	Department of Employment and Labour
DHET	Department of Higher Education and Training
DoC	Department of Communications
DoH	Department of Health
DoL	Department of Labour
DPME	Department of Planning, Monitoring and Evaluation
DPSA	Department of Public Service and Administration
DSBD	Department of Small Business Development
DSI	Department of Science and Innovation
DST	Department of Science and Technology
DTI	Department of Trade and Industry
DUT	Durban University of Technology
EPWP	Expanded Public Works Programme
FET	Further Education and Training
FPP	Future Professors Programme
GETC	General Education and Training Certificate
GETCA	General Education and Training Certificate for Adults
GFETQSF GIS	General and Further Education and Training Qualifications Sub-Framework Geographic Information System
HDI	Historically Disadvantaged Institution
HDI-DP	Historically Disadvantaged Institution Historically Disadvantaged Institutions Development Programme
HE	Higher Education
HEI	Higher Education Institution
HELMP	Higher Education Institution Higher Education Leadership and Management Programme
HEMIS	Higher Education Management Information System
HEQCIS	Higher Education Quality Committee Information System
HEQSE	Higher Education Qualifications Sub-Framework
HRDC	Human Resource Development Council
ICT	Information and Communications Technology
IIDSP	Integrated Infrastructure Development Support Programme
IIPSA	Infrastructure Investment Programme for Southern Africa
IT	information technology
LED	Local Economic Development
LMIU	Labour Market Intelligence Unit
M&E	Monitoring and Evaluation

NATEE	Madium Tama Europolitum Eromouroul
MTEF	Medium-Term Expenditure Framework
MTSF	Medium-Term Strategic Framework
NAMB	National Artisan Moderation Body
NASCA	National Senior Certificate for Adults
NATED	National Accredited Technical Education Diploma
NCV	National Certificate Vocational
NDP	National Development Plan
NEDLAC	National Economic Development and Labour Council
NESP	Nurturing Emerging Scholars Programme
nGAP	New Generation of Academics Programme
NGO	Non-governmental Organisation
NIHSS	National Institute for Humanities and Social Sciences
NLRD	National Learner Record Database
NOC	National Occupational Certificate
NPO	Non-profit Organisation
NPPSET	National Plan for Post-School Education and Training
NQF	National Qualifications Framework
NRF	National Research Foundation
NSA	National Skills Authority
NSC	National Senior Certificate
NSDP	National Skills Development Plan
NSF	National Skills Fund
NSFAS	National Student Financial Aid Scheme
OA2020	Open Access 2020
OER	Open Educational Resource
OIHD	Occupations in High Demand
OQSF	Occupational Qualifications Sub-Framework
PANSALB	Pan South African Language Board
PHEI	Private Higher Education Institution
PQM	Programme Qualification Mix
PSET	Post-School Education and Training
QCTO	Quality Council for Trades and Occupations
RPL	
	Recognition of Prior Learning
SAIVCET	South African Institute for Vocational and Continuing Education and Training
SANLIC	South African National Library and Information Consortium
SANREN	National Research and Education Network
SAQA	South African Qualifications Authority
SDA	Skills Development Act
SDL	Skills Development Levy
SDP	Skills Development Provider
SEDA	Small Enterprise Development Agency
SET	Sector Education and Training
SETA	Sector Education and Training Authorities
SETMIS	Sector Education and Training Management Information System
SHIP	Student Housing Infrastructure Programme
SRC	Student Representative Council
SSAUF	Staffing South Africa's Universities Framework
TIA	Technology Innovation Agency
TOC	Transformation Oversight Committee
TVET	Technical and Vocational Education and Training
TVETMIS	Technical and Vocational Education and Training Management Information System
UCCF	University Council Chairs Forum
UCDG	University Capacity Development Grant
UCDP	University Capacity Development Programme
Umalusi	Council for Quality Assurance in General and Further Education and Training
USAf	Universities South Africa
	University Staff Doctoral Programme
WPBL	Workplace-Based Learning

LIST OF TABLES AND FIGURES

List of tables

Table 1:	Summary of system goals, objectives and outcomes	33
Table 2:	Proposed revised NQF with aligned qualification nomenclature	44
Table 3:	The South African NQF levels and qualification types	45
Table 4:	Qualifications to be offered by CET colleges	46
Table 5:	Qualifications to be offered at TVET colleges	46
Table 6:	Qualifications to be offered at higher education colleges	46
Table 7:	Qualifications offered at universities	47
Table 8:	NPPSET implementation phases, focus areas and responsibility	87

List of figures

Figure 1:	Overview of institutions in the PSET system	29
Figure 2:	Roles and responsibilities of PSET institutions and relationships with external institutions	30
Figure 3:	Comparing the size and shape of the PSET system in 2017 and 2030	31

MINISTER'S FOREWORD

The White Paper for Post-School Education and Training of 2013 sets out a vision for a post-school education system that enriches lives, promotes social justice and overcomes historical inequalities. This National Plan for Post-School Education and Training (the Plan) gives effect to that vision. The Plan simplifies, aligns, and clarifies the range of policy documents, plans, and strategies currently in existence that impact on the system without reducing the diversity of the system, but making it work better *as a system*, bringing together institutions and traditions with very different histories and investments, and finding ways of making them work together towards common goals. Socially, politically and economically, we cannot afford a disparate system.

The post-school education and training (PSET) system consists of three main types of public institutions: community education and training (CET) colleges, technical and vocational education and training (TVET) colleges and higher education (HE) institutions, as well as private providers in the CET, TVET and HE sectors, all with an important role to play in the whole. The Plan provides for an expanded and differentiated system, in which the TVET and the CET sectors are expected to enrol 3.5 million students by 2030 or well over two-thirds of all PSET students. All colleges and universities providing post-school sector opportunities across these sectors will work closely with institutions that promote skills development priorities as identified in the National Skills Development Strategy (2030) to realise the skills revolution.

The Plan envisages a diversity of quality learning opportunities, both public and private, for students. The distinct missions, specialised programmes, modalities of provision, research and innovation foci, localities, community engagements and partnerships of this diverse system will be carefully steered and supported by dedicated planning, funding, guality assurance and monitoring mechanisms. In the public system, consideration will be given to expanding opportunities through multi-site campus development at existing universities and colleges, expanding campus sites at universities and colleges that have the capacity, and the quality of education and training provision. Consideration is also being given to the establishment of education precincts, where interconnected institutions support each other in the delivery of their individual mandates, for example the Imbali education precinct, which shows possibilities for reducing costs through collaboration, integrated planning and shared infrastructure. This is a multi-stakeholder collaboration which includes the Department of Higher Education and Training (DHET), Durban University of Technology (DUT), uMgungundlovu Further Education and Training (FET) College, the KwaZulu-Natal Provincial Education Department, and Msunduzi Municipality. The education precinct links together a range of education institutions, including a university, a TVET college, three high schools (a technical high school with boarding establishment, a commercial high school, and a general high school), a special needs school, a primary school and a community college, all bordering the University, and aims to improve and integrate various tiers of education, including school and post-school facilities and associated amenities, into a sustainable education delivery system. The bringing together of the DHET and the Department of Science and Innovation (DSI) under one ministry provides an opportunity for the development of an innovation hub given the surrounding industries in the area and the need to link higher education and industry. Care will be taken in the implementation of the Plan to ensure alignment and integration with the DSI Decadal Plan which is under development.

CET colleges, which signal a key policy shift introduced by the White Paper, will cater for a diverse range of people with different needs, providing quality education and training in



their communities. The colleges will provide skills for access to entry level jobs and prepare students for articulation to TVET college opportunities and higher.

TVET colleges will increase the employment prospects of students through appropriate workplace-based experience that will require close cooperation with industry and the support of institutional plans developed in partnership with the sector education and training authorities (SETAs). This will increase the opportunities for the private sector to make better use of their skills levies, and to provide spaces, equipment and training for future employees even while developing their existing employees, including some as trainers.

The South African Institute for Vocational and Continuing Education and Training (SAIVCET) will provide support for curriculum development and staff professional development in the TVET and CET college sectors to strengthen the programmes and quality of provision in these sectors.

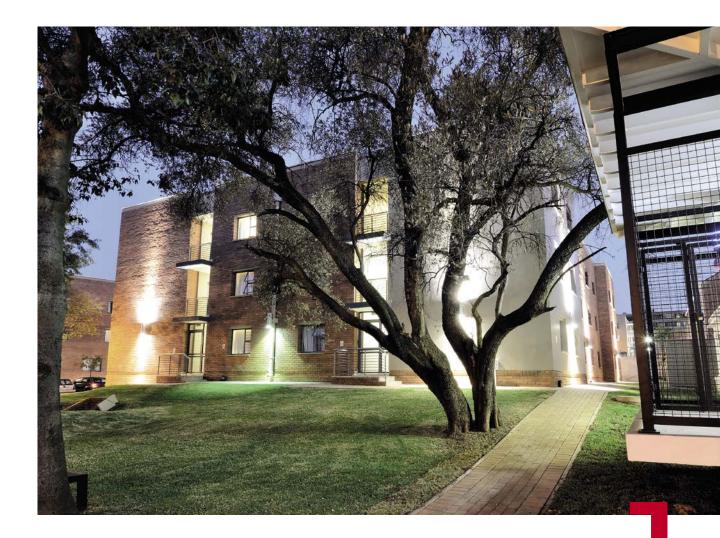
The higher education sector will both expand and be strengthened. The Plan details additional support for initiatives aimed at improving student success, including foundational and extended curriculum programmes and student services, particularly through the collaborative University Capacity Development Programme that focuses in a holistic manner on student, staff, and programme and curriculum development. More sustained critical reflection on all these areas will also take further and promote much-needed transformation of higher education institutions (and, indeed, all post-school institutions) and their staff, curricula and cultures.

Students who do not have to worry about their funding perform better and have a better success rate. The new DHET bursary scheme for students – which is already being implemented for all years of study at TVET colleges and is being progressively phased in at universities – covers the costs of tuition and books and includes allowances for accommodation, meals and transport, and dovetails with the several quality and support initiatives outlined in the Plan.

All post-school sector institutions need more and better planning, support and resourcing so that they can improve their capacity, quality and responsiveness. This is especially prioritised in the Plan. It means better enrolment planning, which will allow institutions to make better decisions, informed by their knowledge of the country's and their locality's social and economic needs as well as data on supply and demand trends; it will also allow them to develop areas in which to innovate. It also means intentionally thinking about how students can move within and between institutions. The Plan emphasises that articulation should be intentional and can be achieved through many mechanisms, including systematic planning of qualifications between the Department of Basic Education (DBE), DHET, South African Qualifications Authority (SAQA), Council on Higher Education pathways are clear and articulation barriers are removed.

Higher education and TVET institutions will continue to receive earmarked infrastructure grants to enable them, in a calculated and planned manner, to take up increasing numbers of students over time while simultaneously improving the quality of teaching and learning for all. Funding provisions will continue to be made to address infrastructure backlogs at historically disadvantaged institutions (HDIs). Infrastructure for CET colleges will be developed on the basis of demand and complemented by the repurposing or better utilisation of existing buildings. Information and communications technologies (ICT), open distance learning and online learning have all become more important, especially given the global COVID-19 pandemic that has exposed the deep historical inequalities within our institutions and the fault lines in our institutional capability to deal with education emergencies and deliver education remotely. Our institutions will continue to strengthen the facilities that have been used during institutional closures to build a more resilient education system. The DHET will invest in the development and strengthening of HDIs through the Historically Disadvantaged Universities Development of HDIs are consolidated

The Plan indicates the goals, strategies and responsibilities for achieving the vision of the White Paper: an improved, transformed, expanded, responsive and articulated PSET system. It looks forward to a South Africa with reduced unemployment, eroded poverty and reduced inequality, a country that is socially just, inclusive and peaceful.



and coordinated for the sustainable development of all institutional facets of HDIs within a differentiated university sector.

The Plan indicates the goals, strategies and responsibilities for achieving the vision of the White Paper: an improved, transformed, expanded, responsive and articulated PSET system. In doing so, it acknowledges and tackles the many constraints and inefficiencies of the current system, while building on those areas that are working well. It looks forward to a South Africa with reduced unemployment, eroded poverty and reduced inequality, a country that is socially just, inclusive and peaceful.

Thank you to everyone who has contributed to the development of the Plan, and particularly the members of the ministerial task teams convened for this very purpose. Your input was invaluable.

Dr BE Nzimande Minister of Higher Education, Science and Technology

The higher education sector will both expand and be strengthened. The Plan details additional support for initiatives aimed at improving student success, including foundational and extended curriculum programmes and student services, particularly through the collaborative University Capacity Development Programme that focuses in a holistic manner on student, staff, and programme and curriculum development.

DIRECTOR-GENERAL'S FOREWORD



It is my pleasure to present the first National Plan for Post School Education and Training (NPPSET) on behalf of the Department of Higher Education and Training.

The NPPSET is the logical culmination of many years of work to provide an integrated and systematic national development framework to direct the evolution of the entire post-school education and training (PSET) system in line with the logic of the White Paper for Post-School Education and Training of 2013.

We now have a policy and developmental framework integrating three critical parts of the post-apartheid post-school education and training landscape – universities, technical and vocational colleges and community education and training colleges, together with skills authorities. The NPPSET therefore supersedes the 2008 National Plan for Further Education and Training in South Africa and marks the beginning of a new era for the entire sector.

Although much has already been done over the last two decades or so to promote some of the most important features of the PSET institutional landscape, the current realities and future challenges in society and economy requires focus on new aspects highlighted in the White Paper.

A core focus is expansion of provision to include those traditionally not engaged in education, employment and training in towns and cities across South Africa. This will require novel solutions and new experiments to create progressively more opportunities for an equal and inclusive education and training system, especially within reach of the working class and poor.

Education and training providers need to be strengthened and institutions supported to improve their capacity to provide quality education, to improve efficiencies and the success of the system. Achieving this requires recognition and acknowledgement that the PSET must not only be responsive in tackling the unfinished legacies of the past but also gearing itself to facing new and unprecedented challenges of our time. These challenges include, inter alia, major challenges of slow economic growth, rising levels of poverty, inequality and unemployment in the context of deep transformations in the economy, globalisation, technological disruption, climate change and ecological crises.

It cannot therefore be business as usual. The Plan outlines a range of strategies to be implemented to build an expanded, strengthened, and articulated PSET system. Unless our PSET system is increasingly more responsive, flexible and differentiated, we will not meet the challenges of our time.

The Department will align all funding, planning, steering and monitoring and evaluation instruments to the strategic objectives and directives outlined in the Plan. It will require the Department to promote the conditions of success of the Plan not only within the newly evolving PSET system, but also across the inter-governmental system, striking critical partnerships with other departments, including Basic Education; Agriculture, Rural Development and Land Reform; Environment, Forestry and Fisheries.

We will also benefit greatly from the close working relationship with, and policy proximity to, the Department of Science and Innovation, with whom DHET falls under the Ministry of Higher Education, Science and Innovation (HESI).

The White Paper is unequivocal about the enormous task at hand in building the PSET system, given the challenges endemic to the system. Both departments are already working very closely together in driving collaboration, resource sharing, joint planning and crowding in precious resources spread across the higher education and science and innovation policy system.

Finally, as is clear from the document, the success of the Plan will depend on the quality and scope of strategic partnerships with the private sector, both in terms of educational provision and co-investment opportunities of many aspects of this system. Without a much higher rate of investment from both public and private sectors, working hand in hand, we will not be able to successfully marshall the task of achieving the ambitious goals outlined in the Plan.

Il would like to express my sincere gratitude to those who contributed to the development of the Plan, especially the staff of the Department of Higher Education and Training and the members of the Ministerial task teams established to assist in its development.

Mujusara not

Dr. Phil Mjwara Acting Director-General Department of Higher Education and Training

EXECUTIVE SUMMARY

This National Plan for Post-School Education and Training (NPPSET) sets out a roadmap for implementing the policy vision of the White Paper for Post-School Education and Training.

The NPPSET sets out key system goals, objectives, outcomes and strategies aimed at achieving an integrated, coordinated, expanded, responsive, cooperative, quality, efficient, successful and articulated post-school education and training (PSET) system over the period 2021/2022 to 2029/2030.

System goals, objectives and outcomes

The following table indicates the six NPPSET system goals and their associated objectives and outcomes.

System goal	Objective	Outcomes
1	1	1.1 Clear and streamlined roles and responsibilities of all key stakeholders and role players
An integrated, coordinated and articulated PSET system	To build a PSET system that is integrated, coordinated and articulated to achieve efficiencies and improve effectiveness	1.2 Improved capability for integration, coordination and articulation in the PSET system
PSET System		1.3 A simplified National Qualifications Framework (NQF)
		1.4 Increased articulation for students between and within the NQF sub-frameworks, and between and within institutions
		1.5 Aligned policy and legislation
2	2	2.1 Increased enrolment in all PSET sectors
	To provide diverse students with access to a comprehensive and multifaceted range of PSET opportunities	2.2 Improved and equitable participation rates
Expanded access to PSET opportunities		2.3 Affordable student fees and accommodation
		2.4 A sustainable student financial aid system
		2.5 Strengthened institutional differentiation
		2.6 Adequate infrastructure to support teaching, learning and research
		2.7 Sufficient staff to support expansion
3	3	3.1 A diverse range of qualifications relevant to locality and responsive to community needs
A responsive PSET system	To provide qualifications programmes and curricula that are responsive to the needs of the world of work, society and students	3.2 A diverse range of programmes responsive to the world of work
		3.3 A diverse range of mechanisms to improve research, innovation, commercialisation and entrepreneurship in higher education
		3.4 Programmes that prepare students for global advances in technology

System goal	Objective	Outcomes
4	4	4.1 Improved interface between education and training institutions and skills levy institutions
Improved relations between education and training institutions and the world of work	To nurture a stronger and more cooperative relationship between education and training institutions and the workplace	4.2 Improved links between education and training institutions and employers for workplace-based learning (WPBL)
		4.3 Improved links between education and training institutions and industry to strengthen research and innovation
		4.4 Strong cooperative relations between employers and education and training institutions
5	5	5.1 Improved quality of teaching and learning in PSET provider institutions
Improved quality of PSET provision	To build the capacity of PSET provider institutions to provide quality education and training	5.2 Improved quality of research
		5.3 Well-managed and -governed PSET provider institutions
		5.4 Well-qualified staff in the PSET system
		5.5 Improved quality assurance capability
		5.6 Improved quality of infrastructure
		5.7 Safe and healthy environment for students and staff
6	6	6.1 Increased throughput in qualifications
Improved efficiency and success of the PSET system	To improve efficiency and success of the PSET system	6.2 Improved exit outcomes related to the world of work

Outcomes and strategies

The following key strategies are intended to realise the outcomes listed above.

Outcomes	Strategies
1.1 Clear and streamlined roles and responsibilities of all key stakeholders and role players	 The roles, responsibilities, functions and funding frameworks of the quality councils, the Department of Higher Education and Training (DHET) and the South African Qualifications Authority (SAQA) will be refined to reduce duplication and improve efficiency. The Human Resource Development Council (HRDC) will focus on drawing together stakeholders from government, labour, and private-sector and PSET provider institutions to support implementation, as well as to identify blockages and determine interventions to address them. The Quality Council for Trades and Occupations (QCTO) and National Artisan Moderation Body (NAMB) will merge to become the primary quality assurance body for trades and occupations. Sector education and training authorities (SETAs) will concentrate on supporting skills planning, industry engagement, funding and WPBL, and will be monitored and evaluated by the National Skills Authority (NSA).
1.2 Improved capability for integration, coordination and articulation in the PSET system	 The skills development levy will complement government baseline funding for public PSET provider institutions while continuing to support private providers. An Infrastructure Development Support Programme will be established to support institutions and guide the planning, acquisition and development of infrastructure across the PSET system. The Department will provide information and insight into skills needs through a research programme on labour market intelligence in order to improve the responsiveness of the PSET system to the world of work. The higher education (HE), technical and vocational education and training (TVET), sector education and training (SET) and community education and training (CET) management information systems will be linked, and the collection, curation and analysis of data from and by all PSET provider institutions, including private institutions, SETAs and employers, will be streamlined and simplified, and processes put in place to ensure reliability, accuracy and quality. Capacity for evidence-based planning, policy development, financial planning and management, monitoring and evaluation across the system will be improved.
1.3 A simplified NQF	 The DHET will work with SAQA and the quality councils to address all NQF-related issues, including, inter alia, articulation, simplifying occupational qualification nomenclature and developing policies on NQF matters. The quality councils and SAQA will simplify accreditation and registration processes. The sub-frameworks, in particular the higher education qualifications sub-framework (HEQSF) and the occupational qualifications sub-framework (OQSF), should be reviewed to ensure alignment and reduce the proliferation of programmes leading to qualifications. The NQF Act will be reviewed, considering the recommendations of the report of the NQF evaluation undertaken by the Department in collaboration with the Department of Planning, Monitoring and Evaluation (DPME).
1.4 Increased articulation for students between and within the NQF sub-frameworks, and between and within institutions	 Unnecessary and unfair barriers to student articulation between programmes and NQF levels will be addressed through a joined-up planning process between the DHET, Department of Basic Education (DBE), Council on Higher Education (CHE), QCTO and the Council for Quality Assurance in General and Further Education and Training (Umalusi).
1.5 Aligned policy and legislation	• Policy and legislation will be reviewed to consider the implications of this Plan.

Outcomes	Strategies
2.1 Increased enrolment in all PSET sectors	 Enrolment planning processes currently in operation (in the higher education sector) will be critically assessed, and new or revised enrolment planning processes, policies and guidelines (particularly in the TVET and CET sectors) will be developed, taking into account all relevant factors, including data, performance, demand, capacity, resources and funding. TVET and CET colleges will be marketed as the PSET provider institutions of choice. Open, distance and online learning will grow gradually. Skills programme-related partnerships between CET and TVET colleges will be encouraged.
2.2 Improved and equitable participation rates	 Improved participation rates, particularly for African and Coloured students and students with disabilities, will be determined and supported through enrolment planning and other mechanisms.
2.3 Affordable student fees and accommodation	 An effective university-fee regulatory policy framework will be developed and implemented. Public–private partnerships and alternative building methodologies to increase the provision of affordable student housing should be explored.
2.4 A sustainable student financial aid system	 Free, full cost of tuition and learning support materials for university and TVET college students from poor and working-class backgrounds. Subsidies and allowances to support the living expenses of poor and working- class students at universities and TVET colleges. A comprehensive student funding model to support all students who require funding, including the 'missing middle' students, must be developed. Multipronged funding strategies for the inclusion of people with disabilities in the PSET system will be developed.
2.5 Strengthened institutional differentiation	 CET colleges will be differentiated according to their size, geographical spread, programme offerings and the findings of the Community Learning Centre (CLC) pilot process. TVET colleges will be differentiated according to their responsiveness to community, local, regional and national developmental needs and demands. This will be supported by several partnership arrangements with employers in niche areas, and selected TVET campuses will be developed as Centres of Specialisation. Higher education institutions will be differentiated according to their mandates and negotiated institutional missions. The Historically Disadvantaged Universities Development Programme (HDI-DP) which is aimed at consolidating the discrete interventions to support the development of HDIs, will be utilised to sustainably strengthen management and governance, infrastructure and facilities, student experience, staffing, teaching and learning, and community engagement so that HDIs contribute meaningfully within a differentiated HE sector. Private PSET provider institutions will be encouraged to directly provide, and/or work together with public institutions to provide, niche qualifications not in public provider institutions, to support institutional and programme differentiation. Funding and funding frameworks will be adjusted where necessary to support institutional differentiation, and greater intra- and inter-sector and regional collaboration will be promoted and supported.
2.6 Adequate infrastructure to support teaching, learning and research	 Infrastructure development will prioritise existing projects and agreements, infrastructure maintenance backlogs, student housing projects, infrastructure backlogs at HDIs, and selected new developments in line with integrated planning for a purposefully differentiated PSET system. Where needed, new CET campuses will be complemented by repurposing unused or underutilised government-owned buildings. Connecting all TVET college campuses through the TVET College Connectivity Project into the National Research and Education Network (SANREN) by 2023 and extending connection to CET colleges as the system is expanded.

Outcomes	Strategies
2.7 Sufficient staff to support expansion	 Appropriate CET staff numbers will be informed by the findings of the CLC pilot programmes together with the Policy on Staffing Norms. Appropriate TVET staff numbers will be determined at sector level as part of operational planning. A strategy to recruit industry personnel to TVET colleges will be developed and implemented. The New Generation of Academics Programme (nGAP), which stimulates the recruitment of young academics into universities, will continue to recruit and support the development of a minimum of 100 new university academics annually, and efforts will be made to secure additional resources and partnerships to increase this number. A recruitment strategy to encourage high-achieving postgraduate students to consider an academic career will be developed and implemented.
3.1 A diverse range of qualifications relevant to locality and responsive to community needs	 CET colleges will offer skills/occupational programmes, community education programmes, general or academic programmes (particularly the General Education and Training Certificate for Adults [GETCA] and the National Senior Certificate for Adults [NASCA]) and foundational learning programmes. By 2030, TVET colleges will offer general vocational programmes (particularly the National Certificate Vocational [NCV]), skills/occupational certificate programmes, foundational learning programmes, higher certificate programmes (initially in partnership with universities), advanced certificate programmes, and, beyond that, those with capacity will offer a range of undergraduate certificate, diploma and degree programmes in specific niche areas. Universities will offer general formative programmes, aronge of postgraduate professional and research-oriented programmes. Universities will be supported to develop engagement policies and strategies (with the CHE advising on policy, reporting, monitoring and sharing of good practice) and to integrate these into teaching, learning and research. Through the Internationalisation Policy Framework, outbound scholarship and academic exchange opportunities will be broadened and foreign postgraduate enrolments encouraged.
3.2 A diverse range of programmes responsive to the world of work	 CET colleges will analyse municipal local economic development plans and Labour Market Intelligence Unit (LMIU) data to assess demand and develop programmes, including programmes which articulate with TVET studies, and skills development programmes where needed by other government departments. SAQA and the QCTO will review all NQF Level 2 and 3 occupational certificates and NQF Level 4 National Occupational Certificates (NOCs) with particular regard to the possibility of simulated workplace-based experience components, as there are limitations currently with placements for WPBL. TVET Centres of Specialisation will initially focus on 13 priority trades in demand and will extend to other trades as identified in the pilot review. University enrolment and Programme Qualification Mix (PQM) planning will be reviewed to ensure that they are clear and responsive to the changing national and global contexts. Occupational programmes will be responsive to global technological advancements.

Outcomes	Strategies
3.3 A diverse range of mechanisms to improve research, innovation, commercialisation and entrepreneurship in higher education	 The DHET, the Department of Science and Innovation (DSI) and the Department of Trade and Industry (DTI) will establish a formal collaborative mechanism to better align research and innovation policies, plans, targets and monitoring. The National Skills Fund (NSF) will be encouraged to fund research and innovation which cuts across PSET sectors. Partnerships with key stakeholders will be established to enable the implementation of joint initiatives to strengthen linkages between research, innovation, entrepreneurship and commercialisation in higher education. The Entrepreneurship Development in Higher Education Programme will be implemented to build entrepreneurship in universities, with a focus on developing student entrepreneurship, entrepreneurship in academia, and entrepreneurial universities. The Department will work with the DSI and the National Research Foundation (NRF) to align programmes that are being implemented to promote research, innovation and commercialisation of intellectual property and patents in universities, and to enable joined-up funding for these initiatives in order to maximise impact.
3.4 Programmes that prepare students for global advances in technology	 PSET provider institutions will ensure that their programmes, curricula and teaching and learning are geared to the unfolding opportunities of the technological and digital advancement sometimes referred to as the fourth industrial revolution (4IR). PSET provider institutions will strengthen their capabilities for blended and online learning.
4.1 Improved interface between education and training institutions and skills levy institutions	 SETAs will gather data on skills needs, engage with stakeholders and standardise their timelines with respect to providing skills development support and funding, and a system of shared SETA services will be established to promote a more efficient and cost-effective use of resources. The SETAs will support implementation of enrolment plans through funding, encourage employer and labour voice and participation, and promote WPBL.
4.2 Improved links between education and training institutions and employers for workplace-based learning (WPBL)	 Programme design processes will be restructured and streamlined so as to be more efficient, relevant and innovative and less time-consuming for employers and students. The nature, planning, management, administration, delivery, duration and quality assurance of WPBL, and related institutional, workplace and staff capacity, will be optimised and incentivised.
4.3 Improved links between education and training institutions and industry to strengthen research and innovation	 Technology transfer and commercialisation capacity in universities will be strengthened through capacity enhancement programmes, data collection on technology transfer and through linkages with the Technology Innovation Agency (TIA), the NRF and sister government departments. Industry–university partnerships will be strengthened.
4.4 Strong cooperative relations between employers and education and training institutions	• The DHET will investigate the establishment of a repository of engaged scholarship outputs to enable their wider availability, use and replication.

Outcomes	Strategies
5.1 Improved quality of teaching and learning in PSET provider institutions	 The quality of teaching and learning will be made a planning, institutional mission and reporting priority, supported by funding for maintaining and developing good-quality infrastructure and affordable student housing. CET colleges will provide a range of appropriate academic and psychosocial student support and career advice services. TVET colleges will audit and better coordinate their internal and external student support services, for which norms will be developed and catalytic funding provided. TVET colleges, particularly Centres of Specialisation, will acquire or share workplace technologies, and pilot and develop capacity for distance and blended learning (including online learning). University extended curriculum programmes will be supported and strengthened. African languages, African language departments, and teaching, learning and research in African language policies as well as multilingualism in communication and administration will be promoted. A national framework for strengthening university teaching (including benchmarks, professional development, recognition and rewards and the promotion of a scholarship of teaching and learning) has been developed and its implementation will be supported. Professional, programme, curriculum and institutional and national development priority areas and institutional and cross-sectoral collaborative technology-enhanced teaching and learning will be advanced through institutional targets for undergraduate/postgraduate mixes and honours, masters and PhD enrolments, better and more effective models of doctoral study and supervision, and a joined-up DHET/DSI postgraduate funding and success strategy. University student analytics, student tracking, student advising and academic and psychosocial support services will be strengthened.
5.2 Improved quality of research	 The number of permanent academic staff in universities with doctorates will be increased, with the aim of reaching the National Development Plan (NDP) target of 75%. The Future Professors Programme (FPP) will be implemented to grow the pool of black and female professors. National licences for key journal databases will be prioritised. Universities South Africa (USAf), the NRF, DHET and DSI, and the South African National Library and Information Consortium (SANLiC) will lead convenings on Open Access 2020 (OA2020), research on current spend on journals, publication collaborations and journals in which South African scholars are publishing, build relationships with the OA2020 and develop a national roadmap for an open access paradigm for scholarly publications.
5.3 Well-managed and -governed PSET provider institutions	 An appropriate, fit-for-purpose governance model (or models) will be developed for CET colleges. TVET council structures will be reviewed, and a capacity development framework for TVET managers and councils, as well as support programmes for student representative councils (SRCs), will be developed and implemented. The Transformation Oversight Committee (TOC) will advise the DHET on developing a systemic framework for reporting and monitoring institutional transformation indicators in universities. Clear university council appointment criteria and institutional codes of good practice will be formulated and operationalised; all members of university councils will receive training, support and induction; and continued support for student governance will be provided at both institutional and national levels. The Higher Education Leadership and Management Programme (HELMP) will focus on developing leadership and management capacity in universities.

Outcomes	Strategies
5.4 Well-qualified staff in the PSET system	 The policy on staffing norms will determine the number of teaching staff required for each CET college, universities will be supported to offer qualification programmes for TVET and CET college lecturers, and professional development will be enabled. Professional development frameworks for TVET lecturers as well as leadership and management staff will be developed, implemented and monitored, and a study of TVET lecturer supply and demand will be conducted. The University Capacity Development Programme (UCDP), through its various staff development sub-programmes, will address staff capacity and professional development imperatives. University staff equity and transformation plans will be closely monitored.
5.5 Improved quality assurance capability	 Umalusi will have oversight of assessment and certification of the GETCA and NASCA, and the QCTO of the assessment and certification of skills/occupational programmes. The QCTO will oversee the development of occupational qualifications (prioritising the largest occupational clusters), drawing on LMIU data and engagements with industry and government, and appoint additional specialised staff for these purposes. The TVET examination system will be reviewed with an eye to streamlining and reducing external examinations and introducing rigorous internal examinations. The quality assurance functions of all quality councils concerned with the TVET sector will be reviewed and amended to improve efficiencies. A review of the CHE will be undertaken with respect to its functions in relation to the roles and functions of the DHET, other quality councils and SAQA, with a view to simplifying and streamlining the NQF. The proposed review will also aim at strengthening the advisory function of the CHE, while recommending how a new round of quality assurance audits and expanded national reviews can improve the quality of higher education provision.
5.6 Improved quality of infrastructure	 The macro infrastructure framework developed for universities will be strengthened and extended to include TVET and CET infrastructure. CET college infrastructure and facilities will be built or repurposed, considering the availability of government buildings and partnerships with other PSET or private providers. A framework and norms for TVET infrastructure utilisation, sharing and replacement will be developed. Infrastructure and efficiency grants will support teaching, learning and research infrastructure and reduce maintenance backlogs at universities.
5.7 Safe and healthy environment for students and staff	 Appropriate interventions will be implemented by the Department and PSET provider institutions to promote the health and safety of students and staff. All PSET institutions will implement the policy framework on gender-based violence.
6.1 Increased throughput in qualifications	 Throughput rates at all colleges and universities will be improved by implementing a range of quality student support initiatives. Regular cohort analysis and/or performance monitoring of throughput (as well as dropout, retention and success, and student, staff and curriculum development, where necessary) at all colleges and universities will facilitate interventions and inform enrolment planning. Improved reporting on and cohort analysis of programme completion data at all colleges and universities will be utilised to assess student progress, inform institutional planning and improve efficiencies.
6.2 Improved exit outcomes to the world of work	 All colleges and universities will gather essential data on graduate destinations which can be utilised by systematic tracer studies to inform employment opportunities and strengthen career guidance offered to students, and feed back into curricula improvement and development. Entrepreneurship development in PSET will be enhanced.

Resourcing and financing the PSET system

The main cost drivers for implementing the NPPSET are, among others, the establishment of CET colleges, the provision of distance and contact modes as well as information and communications technologies (ICTs) for blended and online learning at TVET colleges and universities, improving lecturer–student ratios, improving lecturer quality, improving student success initiatives and student support services, rolling out fee-free education for specific groups of students and improving access to student accommodation.

The new DHET bursary scheme for university and TVET college students from poor and working-class backgrounds must be effectively implemented. Clear rules and guidelines to ensure the sustainability of the scheme, within the resources available, must be developed and implemented. Funding will be required to cover all poor and working-class CET students as well. CET programmes will in the main be offered fee-free.

All current PSET funding frameworks will be reviewed and redeveloped for each sector, considering enrolments, outputs, joined-up fiscal and skills development levy (SDL) funding, and the development of workplace-based and work-integrated learning platforms to support differentiation.

Innovative financing mechanisms will be utilised for increasing funding sources and coordinating efforts given the economic challenges that will occur as a result of the unprecedented COVID-19 pandemic:

- The DHET will work with all PSET stakeholders, as well as National Treasury, to gather and assess funding and cost data and mobilise a sustainable ecosystem of student funding to achieve PSET system goals. All available financial resources must be prudently managed and will be monitored.
- Non-traditional sources of financing the PSET system will be pursued, including the establishment of stronger partnerships with the private sector, foundations, philanthropies and other donors to ensure alignment of efforts towards achieving NPPSET goals.

Implementation strategy

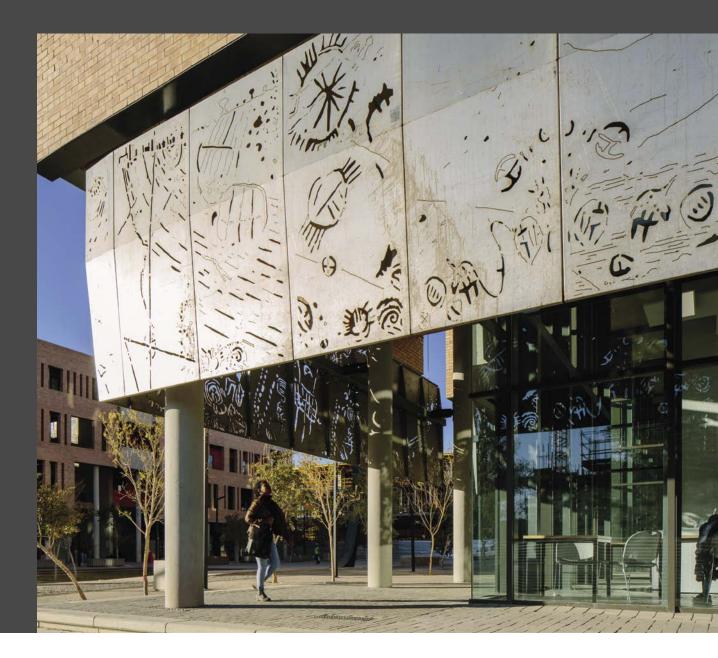
The implementation of the NPPSET will be the joint responsibility of all stakeholders in the PSET system.

Chapter 8 presents the NPPSET's high-level implementation strategy, including all actions, along with the institutions responsible and timeframes.

All current PSET funding frameworks will be reviewed and redeveloped for each sector. Innovative financing mechanisms will be utilised for increasing funding sources and coordinating efforts.

INTRODUCTION

By 2030, the PSET system should manifest the vision of the White Paper for a socially just, responsive, coordinated and articulated system which provides access to and supports the successful completion of a diversity of quality learning opportunities with vastly improved links to the world of work.



A Purpose of the National Plan for Post-School Education and Training

The National Plan for Post-School Education and Training (NPPSET, or the Plan) is a roadmap to realising the goals of the White Paper for Post-School Education and Training (the White Paper).

It indicates the sum or endpoint of the combined goals of an integrated, coordinated, articulated, expanded, accessible, responsive, strengthened, cooperative, quality, efficient and successful post-school education and training (PSET) system by 2030.

It also presents the outcomes that will indicate the achievement of these goals, including, inter alia:

- streamlined roles and responsibilities;
- improved, rationalised and integrated planning and articulation;
- increased enrolments and participation rates;
- restructured funding processes;
- differentiated institutions;
- more diverse, responsive and relevant programmes;
- enhanced cooperation between education and training institutions and employers;
- improved quality of teaching, learning, governance, staff, quality assurance and infrastructure;
- improved research productivity and innovation; and
- increased throughput, completion and exit outcomes.

Above all, it details the strategies through which the outcomes will be accomplished and the PSET stakeholders primarily responsible for their implementation.

By 2030, the PSET system should manifest the vision of the White Paper for a socially just, responsive, coordinated and articulated system which provides access to and supports the successful completion of a diversity of quality learning opportunities with vastly improved links to the world of work.

B Principles guiding the Plan

Several key principles guided the development of this Plan:

- The Plan converts the policy vision of the White Paper into clear implementation frameworks and strategies.
- The Plan acknowledges that post-school institutions have complex histories, which are both shared and distinct, and that it is possible to transcend the inequalities and divisions of the past. Therefore, transformation, equity and redress underpin the implementation of strategies in the Plan.
- The Plan acknowledges that the quality and capacity of the entire PSET system needs to be developed to ensure that expanded access is accompanied by increased success and that the system is transformed in socially just ways.
- The Plan aligns and integrates work that is already under way in response to the White Paper with additional work needed to fully implement its vision.
- In line with the vision of the White Paper, the Plan consolidates and builds on those aspects of the system that are working well.
- Where change is proposed by the White Paper, the Plan sets out implementation strategies to achieve this change, paying close attention to the need for careful transitions.
- Recognising that the White Paper's notion of a PSET system is new, as its various components have often operated completely separately, the Plan brings institutions with very different traditions and investments together to work towards greater efficiency and effectiveness.

C Plan development process

In the process of developing the Plan, research and data were gathered from a wide range of sources, including the Human Resource Development Council (HRDC), the Education Policy Consortium, the Labour Market Intelligence Project and the Department of Higher Education and Training (DHET).

The expertise of members of the three ministerial task teams for community education and training (CET), technical and vocational education and training (TVET) and higher education, who also consulted source documents and met to debate and agree upon strategies for developing and strengthening their respective sectors, played a critical role in the development of the Plan.

D Situational analysis

Significant progress has been made to expand post-school provision. Between 1994 and 2017, headcount enrolments at universities more than doubled from 495 356 to 1 036 984, and at TVET colleges from 302 550 in 1998 to 688 028 in 2017. Much more still needs to be done to expand the system and provide more meaningful and diverse opportunities.

Where spaces are available at post-school institutions, they are beyond the financial reach of many eligible students, who can afford them only with the assistance of financial aid, which has grown substantially over the years. Loan and bursary awards to students at TVET colleges and public universities increased by 136.6% from R5.966 billion in 2011 to R14.118 billion in 2017. These funds have been managed by the National Student Financial Aid Scheme (NSFAS). There was a 38.6% increase in bursary and loan recipients between 2011 and 2017, from 332 187 to 460 341. Funding opportunities are still limited for those who do not qualify for financial assistance. Many young people, as well as others who seek to further their education, lack sufficient grounding in basic knowledge and skills and are not well prepared for the rigours of post-school studies. They may not have had any form of career information, guidance and counselling, and have little idea what their life options are. The programmes available to or chosen by them are not always those that employers need, and employers and education and training institutions do not work together enough to ensure that supply meets demand.

Under both academic and financial pressure, students often fail to complete their qualifications in the minimum expected time, if they complete at all. Many are likely to drop out and further swell the ranks of those who are not in employment, education or training. Student success initiatives and support services are not systematic and often lack capacity; in the case of the TVET sector, they are not funded by the fiscus.

Most lecturers, faced with huge classes and heavy teaching and administrative workloads, have limited time for professional development to refine their pedagogical expertise, and to engage in curriculum development and research. This impacts negatively on their progression in the system. The academic cohort in universities is ageing and too few capable new lecturers, especially young black women and men, are being recruited and retained. In the TVET sector specifically, there have been no defined professional qualifications until recently, with the development of the policy on qualifications for TVET lecturers, and lecturer experience of industry is limited. In the higher education sector, academic staff transformation is slow, and curricula need to be improved and more critically reflect African experiences and contexts.

The post-school institutions responsible for providing quality learning and teaching are not coping sufficiently with the growing numbers of students. In order to accommodate the demand, institutions require more and better infrastructure, which they need to use more

cost-effectively and share more widely, and their existing infrastructure and equipment needs upgrading and maintenance.

Additionally, the institutions which support and quality-assure those who provide education and training, or which promote and fund skills development, tend to duplicate their activities and lack proper coordination and distinct mandates. National system planning is inadequate, and there is simply not enough money or capacity to meet all needs simultaneously.

Given the achievements and challenges of the system, this Plan strives to realise a brighter future.

The White Paper describes the post-school system as comprising all education and training provision for those who have completed their schooling, those who have not completed their schooling, and those who never attended school. The institutions catering for this diverse range of post-school educational capabilities and needs include:

- 26 public higher education institutions;
- 50 public TVET colleges;
- nine CET colleges;
- other state-owned post-school institutions, often training public service workers, but also in the case of nursing and agriculture offering qualifications to the general public, some of which will be public higher education colleges fully integrated into the PSET system by 2030;
- private higher education institutions;
- private colleges offering TVET qualifications;
- skills development providers;
- workplace providers;
- corporate in-house training centres;
- Sector education and training authorities (SETAs) and the National Skills Fund (NSF); and
- regulatory and quality assurance bodies, including the South African Qualifications Authority (SAQA), the Council on Higher Education (CHE), the Quality Council for Trades and Occupations (QCTO), and the Council for Quality Assurance in General and Further Education and Training (Umalusi).

Figure 1 captures the full scope of PSET institutions that the DHET has oversight of.

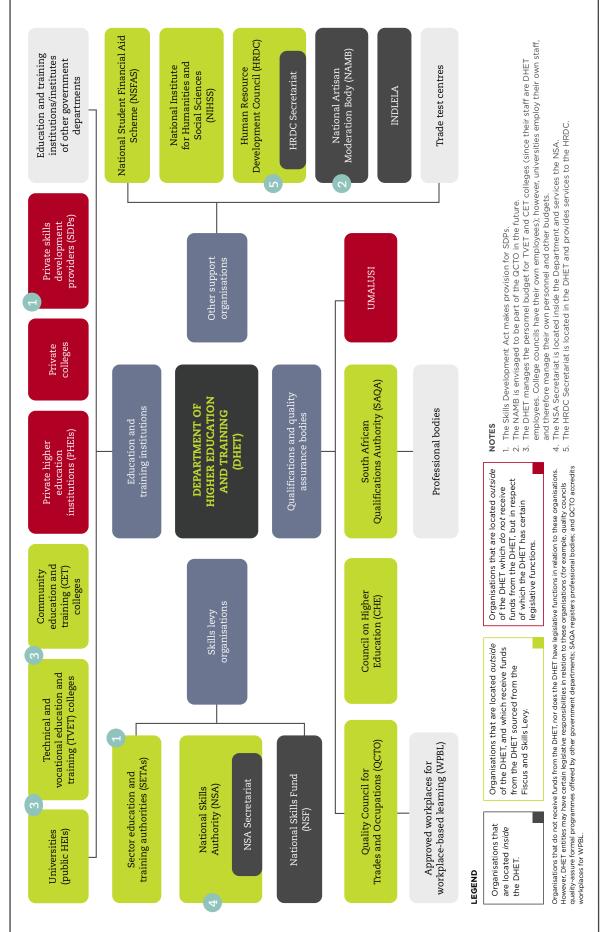
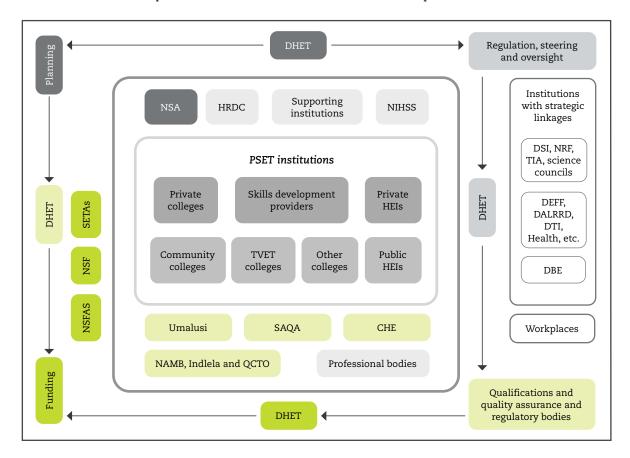


FIGURE 1: Overview of institutions in the PSET system

The system is complex, as highlighted in Figure 2, which shows the PSET institutions in terms of their functions and the relationships between them.





At the core of the PSET system are the provider institutions, which are key to the development, growth and strengthening of the system: the public and private higher education institutions (universities and higher education colleges), TVET and CET colleges, other public colleges under the control of various government departments, private colleges and other skills development providers (including workplaces). These offer a range of qualification and programme types to meet the varied education and training needs of individual citizens, employers, government and society.

In close and immediate support of the provider institutions are the skills levy organisations and quality assurance and professional bodies, which oversee and support the development, quality and relevance of the qualifications and programmes being provided. These bodies include:

- the CHE, QCTO, SAQA and Umalusi;
- the NAMB, which is responsible for artisan assessment and quality assurance;
- the Institute for the National Development of Learnerships, Employment Skills and Labour Assessments, which currently includes the NAMB, a national Trade Test Centre and World Skills South Africa and coordinates the National Artisan Development Strategy as well as the national artisan data collection and correlation through the National Artisan Development Support Centre;
- the NSA, which promotes and monitors skills development;
- the HRDC, which promotes stakeholder participation in human resource development and engages stakeholders to find ways of addressing challenges to effective skills development;
- the National Institute for the Humanities and Social Sciences, which promotes

cooperation and scholarship in the humanities and social sciences; and

 various professional bodies, which regulate the employment requirements within the profession and assess and license/register qualified persons to practise within the profession.

In addition to the support organisations mentioned above, there is a need for an entity to provide curriculum and professional development support for the CET and TVET sectors, conceptualised as the South African Institute for Vocational and Continuing Education and Training (SAIVCET) in the White Paper. The Department will investigate the feasibility of establishing SAIVCET, as well as its organisational structure and location. While this is happening, the work of SAIVCET must start in the Department to strengthen CET and TVET college capacity.

A further layer of support for the provision of education, training and skills development derives from the SETAs, which fund, gather information and act as intermediaries on skills development and workplace-based learning, or WPBL (with the support of workplaces); the NSF, which funds priority national skills development projects; and the NSFAS, which provides financial support to eligible students in colleges and universities.

Oversight of the whole PSET system is the responsibility of the DHET, and this includes system planning (including planning for skills needs and enrolments), system steering according to policy, core funding of public PSET institutions, and regulation and monitoring.

Other government departments, such as Agriculture, Land Reform and Rural Development (DALRD); Basic Education (DBE), Health (DoH), Science and Innovation (DSI), Small Business Development (DSBD), and Trade and Industry (DTI), as well as organisations such as the National Research Foundation (NRF), the Technology Innovation Agency (TIA), the Small Enterprise Development Agency (SEDA) and the science councils, need to cooperate with the DHET on various aspects of PSET provision, planning and funding. These organisations all have strategic interests in the success of PSET provider institutions, and, as such, the DHET must develop collaborative relationships with them to support the development of a coherent and effective system.

E Vision for building an integrated, coordinated, articulated and quality post-school system

The most immediately visible effect of the implementation of the NPPSET will be a postschool system that has been transformed in both magnitude and form. Figure 3 compares the size and shape of the PSET system and component sectors in 2017 with their expected size and shape in 2030, with the differences reflecting the intended impact of the Plan.

In 2030, aside from achieving the White Paper's enrolment targets, the TVET college sector and the higher education sector will have changed their positions in the diagram, with the former now responsible for half of all PSET enrolments. Together, the three strengthened, enhanced, revamped and revitalised PSET sectors will be providing education and training opportunities to over five million students every year.

However, these increased student numbers do not fully reflect the underlying changes to structures and processes that will have made the increased numbers possible. The substance of these systemic changes for South Africa's students and citizens will be considerable and meaningful.

By 2030, young people leaving school will have multiple post-school opportunities across a PSET system with an expanded number of affordable, and often free, spaces. They could choose to attend a CET college near their home, to take vocational, skills or community education modules that empower them to open their own businesses, serve their communities and generally improve their quality of life, or they could register for a National Senior Certificate for Adults (NASCA) at their local Community Learning Centre (CLC). In both cases, their studies would allow them to register at a TVET college should they wish to study further towards a vocational or occupational qualification, or accumulate the foundational knowledge needed to gain entry to undergraduate study at a higher education college or university.

A young school leaver armed with a National Senior Certificate (NSC) will also have the option of studying further at a CET, TVET or higher education college or at a university in the full knowledge that their college qualification has a purpose that is meaningful and will afford them as many employment opportunities as a university qualification at the same level. Regardless of their preference, they will have been provided with career guidance and counselling from Khetha, the national career advice portal.

All students will apply through the Central Applications Service (CAS), which will offer a seamless platform for applications to any public post-school institution. Many will hail from poor backgrounds, which means that their CET, TVET and undergraduate university studies will be funded by the state, which will cover the costs of tuition and subsidise study materials, accommodation, food and transport. Student support services at their institution of choice will provide them with academic and psychosocial support. Students admitted into universities who require additional support to succeed in their studies, will be enrolled in extended curriculum programmes. They may also enrol for foundational higher certificates that enable them to articulate into an undergraduate qualification with a good chance of success.

Should their programmes require WPBL, their institutions, and especially the SETAs, informed by national skills development planning data, will liaise with local and national employers to connect them to available workplaces supported by skills levy funding.

The dedicated and capable lecturing, support and management staff at all institutions, supported by better planning and coordination across the entire PSET system, will work in tandem with improved infrastructure to enhance students' chances of regular progression and ultimate success, and monitor their destinations after graduation.

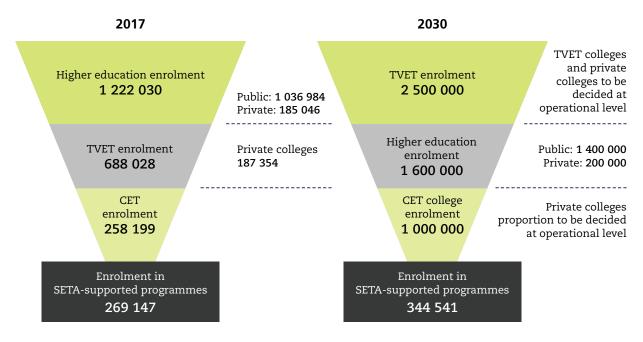


FIGURE 3: Comparing the size and shape of the PSET system in 2017 and 2030

F System goals, objectives and outcomes

The system goals, objectives and outcomes to achieve the White Paper's vision are summarised in Table 1.

TABLE 1: Summar	v of system		objectives	and outcomes
IADLE I. Summar	y of system	i goais,	objectives	and outcomes

System goal	Objective	Outcomes
1 An integrated, coordinated	1 To build a PSET system that	 Clear and streamlined roles and responsibilities of all key stakeholders and role players
and articulated PSET system (see Chapter 1)	is integrated, coordinated and articulated to achieve efficiencies and improve effectiveness	1.2 Improved capability for integration, coordination and articulation in the PSET system
		1.3 A simplified National Qualifications Framework (NQF)
		1.4 Increased articulation for students between and within the NQF sub-frameworks, and between and within institutions
		1.5 Aligned policy and legislation
2	2	2.1 Increased enrolment in all PSET sectors
—		2.2 Improved and equitable participation rates
Expanded access to PSET opportunities	To provide diverse students with access to	2.3 Affordable student fees and accommodation
(see Chapter 2)	a comprehensive and	2.4 A sustainable student financial aid system
	multifaceted range of PSET opportunities	2.5 Strengthened institutional differentiation
		2.6 Adequate infrastructure to support teaching, learning and research
		2.7 Sufficient staff to support expansion
3	J To provide qualifications programmes and curricula that are responsive to the needs of the world of work, society and students	3.1 A diverse range of qualifications relevant to locality and responsive to community needs
A responsive PSET system (see Chapter 3)		3.2 A diverse range of programmes responsive to the world of work
		3.3 A diverse range of mechanisms to improve research, innovation, commercialisation and entrepreneurship in higher education
		3.4 Programmes that prepare students for global advances in technology
4	4	4.1 Improved interface between education and training institutions and skills levy institutions
Improved relations between education and training institutions and the world of work (see Chapter 4)	To nurture a stronger and more cooperative relationship between education and training institutions and the workplace	4.2 Improved links between education and training institutions and employers for workplace-based learning (WPBL)
		4.3 Improved links between education and training institutions and industry to strengthen research and innovation
		4.4 Strong cooperative relations between employers and education and training institutions

System goal	Objective	Outcomes
5	5	5.1 Improved quality of teaching and learning in PSET provider institutions
Improved quality of PSET provision	To build the capacity of PSET provider institutions to provide quality education and training	5.2 Improved quality of research
(see Chapter 5)		5.3 Well-managed and governed PSET provider institutions
		5.4 Well-qualified staff in the PSET system
		5.5 Improved quality assurance capability
		5.6 Improved quality of infrastructure
		5.7 Safe and healthy environment for students and staff
6	6	6.1 Increased throughput in qualifications
Improved efficiency and success of the PSET system (see Chapter 6)	To improve efficiency and success of the PSET system	6.2 Improved exit outcomes to the world of work

G Sector-specific outcomes

The outcomes to achieve the PSET system goals can also be distinguished by how they relate to each of the three PSET sectors: CET, TVET and higher education.

CET sector

CET colleges constitute a new institutional type that will cater for the knowledge and skills needs of the large numbers of adults, youth, unemployed and/or poorly educated people and others requiring education and training opportunities which can lead to employment, sustainable entrepreneurship or further learning, and generally improve their quality of life. By 2030, the White Paper envisages one million students enrolled in CET colleges.

To date, opportunities for adult learners and for those not in education, training or employment have been limited and largely of poor quality, with an overconcentration on general education programmes at the expense of skills programmes, poor linkages with both labour market and community needs, mostly part-time and underqualified staff, a lack of dedicated infrastructure, limited teaching and learning materials, and inadequate funding.

To address this situation, CET colleges and their clusters of CLCs – previously known as Public Adult Learning Centres – will be established, repurposed and refurbished in a steady and calculated manner, with the range of programmes that they offer suitably trialled, audited, developed and expanded. With a particular focus on improving the quality and relevance of the CET sector, its student support services will be improved and diversified, its governance systems rendered more fit-for-purpose, its staff quality and qualifications enhanced, and students' progression opportunities clarified and expanded. A properly capacitated CET sector with improved infrastructure will also permit suitable differentiation amongst colleges by encouraging them to be more responsive to local needs and demands, thereby providing support for entrepreneurship and small business development.

With a particular focus on improving the quality and relevance of the CET sector, its student support services will be improved and diversified, its governance systems rendered more fit-forpurpose, its staff quality and qualifications enhanced, and students' progression opportunities clarified and expanded.

TVET sector

TVET colleges are intended to become the cornerstone of the PSET system. In order to provide the technical and vocational/occupational skills which are vital for national social and economic development, as well as to absorb the enrolment growth envisaged by the White Paper, public TVET colleges must expand, improve and become PSET provider institutions of choice. Together, public and private TVET and skills development providers are expected to enrol 2.5 million students by 2030.

Among the challenges currently faced by the public sector are negative public perceptions of the quality and relevance of its programmes, including concerns about limited industry involvement and inadequacies in WPBL components, together with insufficiently qualified and experienced staff, and poor throughput rates and articulation opportunities for students.

Since the main purpose of public TVET colleges is to prepare students for the world of work – that is, for employment, entrepreneurship and sustainable livelihoods – they can best achieve this by strengthening and streamlining their programmes and qualifications and making them more responsive to the knowledge and skills needs of South African society and industry. This in turn can be facilitated by systematic enrolment planning informed by a thorough programme and qualification review; greater institutional differentiation, particularly through developing Centres of Specialisation; much closer working relationships with industry, robustly supported by the SETAs; and much-improved student support services and staff professional development.

Higher education sector

Strengthened, differentiated, student-centred higher education colleges and universities are a vital component of a PSET system that seeks to develop citizens' capabilities, skills and knowledge for a democratic, inclusive and just society.

Currently, far too many public university students do not complete their studies or take too long to do so. Poor throughput and unsatisfactory achievement at undergraduate level limit the numbers and quality of enrolments at postgraduate level. The causes are multifarious: poor career advice, inappropriate curricular pathways, inadequate academic and psychosocial support, alienating institutional cultures and languages of teaching and learning, insufficient infrastructure and facilities, poor living conditions and overburdened staff. The university sector has been drifting towards an unsuitable institutional isomorphism, irrespective of current capabilities or access to appropriate resources, which is misaligned with the broader development imperatives of the country.

In order to make the higher education sector more student-focused and success-oriented, while simultaneously catering for significant enrolment growth (to the order of 1.6 million students across both public and private higher education institutions by 2030), the sector must improve on its ability to learn from what works, and adopt focused, multidimensional and aligned interventions at all levels.

Public higher education colleges, which will mostly focus on quality career-oriented/ professional undergraduate programmes, will be created from restructuring of the current system, aligned to a strengthened and purposefully differentiated public university system. A study on the shape and size of the higher education sector, including a feasibility study on establishing higher education colleges, will be conducted by 2023.

In the public higher education sector, interventions include improving the quality of university teaching and learning at all levels, developing and promoting African languages, optimising the use of new technologies, and providing structured support environments in the form of university-owned or accredited student accommodation. Greater inclusiveness and responsiveness can be achieved through institutional differentiation, implemented by extending and further developing existing steering and reporting mechanisms and relationships. It is also essential to rejuvenate and demographically transform the academic profession; foster internationalisation and engagement; improve institutional governance, regulation and accountability; and strengthen research and innovation.

H Structure of the Plan

This document has eight chapters, of which six focus on each of the six system goals. The remaining two chapters deal with resourcing and financing issues, and provide a consolidated implementation strategy, respectively.

- **Chapter 1:** Developing an integrated, coordinated and articulated PSET system, focuses on Goal 1.
- **Chapter 2:** *Expanding the PSET system*, focuses on Goal 2.
- **Chapter 3:** Improving the responsiveness of the PSET system, focuses on Goal 3.
- **Chapter 4:** Improving relations between education and training institutions and the world of work, focuses on Goal 4.
- **Chapter 5:** Improving the quality of PSET provision, focuses on Goal 5.
- Chapter 6: Improving the efficiency and success of the PSET system, focuses on Goal 6.
- **Chapter 7:** *Resourcing and financing the PSET system*, focuses on funding mechanisms and sources for the entire system.
- Chapter 8: Implementation strategy, presents a broad implementation strategy.

The Appendix presents consolidated strategies drawn from the Plan by sectors, SAQA and quality councils, and skills levy institutions.

CHAPTER

Developing an integrated, coordinated and articulated PSET system



1.1 Introduction

The establishment of the Department of Higher Education and Training (DHET) in 2009 brought together a range of institutions with different histories, strengths and weaknesses, all contributing in varying ways to skills development, education and training outside of the schooling system. The White Paper for Post-School Education and Training calls for the better articulation, coordination and integration of these formerly, largely separate elements, and also for a vastly improved national planning capability, to ensure that government economic and developmental priorities and skills requirements are adequately addressed, as identified in the National Development Plan (NDP); the National Skills Development Plan (NSDP) 2030, which was approved by the minister in 2019; the New Growth Path; the Industrial Policy Action Plan; and the Human Resource Development Strategy.

This chapter outlines strategies for building an integrated, coordinated and articulated post-school education and training (PSET) system, focusing on five key areas:

- clarifying and streamlining the roles and responsibilities of the various PSET stakeholders and institutions;
- improving, rationalising and integrating planning, and developing an integrated approach to funding in the PSET system;
- simplifying the National Qualifications Framework (NQF);
- improving articulation for students between and within the NQF sub-frameworks, and between and within institutions; and
- aligning policy and legislation.

Clarifying and streamlining the roles and responsibilities of all stakeholders in the PSET system, particularly but not only those that previously fell under the ambit of different government departments and levels of government, is an urgent priority. Coupled with this is the need for integrated and hence more efficient and effective systemic planning across the board, but especially regarding infrastructure development, community education and training (CET) college establishment, resource sharing, financing, qualification and programme development, enrolments and data.

A simplified NQF will help to reduce unnecessary complexity and the proliferation of undeliverable qualifications, while facilitating student access to and articulation across different qualification types and levels, and more rationally demarcating quality assurance processes. However, a simplified NQF will not on its own improve articulation across the PSET system; for this to happen, the support, planning and involvement of all PSET institutions, as well as the amendment and better alignment of existing legislation and policy, will be required.

Transformation imperatives are all-encompassing and will inform all aspects of planning, implementation of the Plan, and reporting.

A simplified NQF will help to reduce unnecessary complexity and the proliferation of undeliverable qualifications.

1.2 Integrating and coordinating

System Goal 1: An integrated, coordinated and articulated PSET system

Objective: To build a PSET system that is integrated, coordinated and articulated to achieve efficiencies and improve effectiveness

Priorities:

- to clarify and streamline roles and responsibilities of all key stakeholders and role players;
- to improve capability for integration, coordination and articulation in the PSET system;
- to simplify the NQF;
- to increase articulation for students between and within the NQF sub-frameworks, and between and within institutions;
- to align policy and legislation.

Outcome 1.1: Clear and streamlined roles and responsibilities of all key stakeholders and role players

The roles and responsibilities of the multiple PSET stakeholders and role players need to be clarified in order to reduce inefficiencies and improve the effectiveness of the system. In this light:

- The duplication of key regulatory processes that has characterised the work of the quality councils – the Council on Higher Education (CHE), Quality Council for Trades and Occupations (QCTO) and Council for Quality Assurance in General and Further Education and Training (Umalusi), as well as the South African Qualifications Authority (SAQA) – must be addressed and will require a review and possible amendment of the NQF Act to refine their roles, responsibilities, functions and funding frameworks and enhance their efficiency.
- The Human Resource Development Council (HRDC), which until now had its own strategy and monitoring and evaluation (M&E) framework, will relinquish this in order to focus on drawing together stakeholders from government, labour, and privatesector and PSET provider institutions to support implementation, identify blockages and determine interventions to address them.
- The National Artisan Moderation Body (NAMB), which has a wide scope to coordinate artisan development in the country, will merge with the QCTO.
- The sector education and training authorities (SETAs), which have a central role to play within the post-schooling system as intermediary bodies between demand and supply, need to be rendered more effective and efficient by concentrating their efforts on supporting skills planning through engagement with industry, ensuring that funding is allocated to support provision against demand, and enabling access to and strengthening provision of workplace-based learning (WPBL).
- The National Skills Authority (NSA) will be restructured and refocused to monitor and evaluate SETAs.

Outcome 1.2: Improved capability for integration, coordination and articulation in the PSET system

Improved and integrated capabilities are key for achieving system efficiency, coordination and alignment. The main areas where improved and integrated capability is required are infrastructure development and maintenance, institution building (regarding the establishment of CET colleges), sharing open learning resources, aligned funding processes, academic and enrolment planning and qualification development (particularly occupational qualifications), and reliable and usable data.

Infrastructure planning

- To overcome the currently fragmented and disparate approach to infrastructure development, an Integrated Infrastructure Development Support Programme (IIDSP) will be established within the DHET to guide the planning, acquisition, development and support of infrastructure across the entire PSET system and to ensure that system-wide priorities are considered in all infrastructure development projects. The IIDSP will:
 - » develop a national PSET integrated infrastructure development and maintenance framework to standardise principles, processes and strategies and ensure that account is taken of what infrastructure exists, what has been developed in the recent past (including lessons learnt through the Infrastructure and Efficiency Grant Programme implemented in the higher education sector), what is planned or under development, what requires maintenance and what could be shared or repurposed;
 - ensure local and national audits in order to build up a national database, updated annually, of all infrastructure utilised by PSET institutions;
 - » map PSET provider institutions and campuses, using Geographic Information System (GIS) data, to provide spatial and geographic data that can assist enrolment planning and PSET landscape development; and
 - » oversee the development of a fully integrated PSET national data system, if necessary, through a national audit of both information and communications technology (ICT) infrastructure and relevant national databases.
- All PSET provider institutions will be required to adopt a life-cycle approach to infrastructure development and maintenance (including a comprehensive and ongoing focus on addressing maintenance backlogs), which includes developing infrastructure asset management plans, budgeting and complying with existing regulations and legislation (such as National Infrastructure Asset Maintenance Management Standards, Standards for Infrastructure Procurement and Delivery Management and norms and standards for student housing). They will be assisted in this by the DHET's Macro Infrastructure Framework web-based platform, which will be customised for rollout across the system.
- The DHET will facilitate the implementation of at least three education precincts in areas where at least one CET college, one technical and vocational education and training (TVET) campus and one university campus are in close proximity to one another, in collaboration with other government spheres and departments, such as Education and Health.
- The DHET's Student Housing Infrastructure Programme (SHIP) plans to develop 300 000 new beds by 2026, in part by encouraging PSET provider institutions to build 1 000-bed student villages rather than 100-bed student residences, with funding provided through rentals by students, Infrastructure and Efficiency Grants, institutions' own resources, international and local development finance, the Infrastructure Investment Programme for Southern Africa (IIPSA) and the private sector. The SHIP project management office will work with the IIDSP, with the latter monitoring the delivery of the SHIP. The planning for institutionally owned student housing must be integrated into the macro spatial development plans of each institution.

CET college planning and establishment

- Given the importance of properly constituting the comparatively new CET sector, the significant value and promise it holds for citizens who are often among the poorest of the poor, and the DHET's own currently limited capacity to undertake institution building, the Department will source the necessary expertise required for specific institution-building activities and processes, which will commence with pilots informed by the following:
 - » The Department will ensure that pilot Community Learning Centre (CLC) programme offerings are aligned to national social and economic development programmes like the Expanded Public Works Programme (EPWP), Community Development Works (CDW), smallholder farmer development programmes and cooperatives development as well as specific locally responsive programmes (such as those addressing drug abuse or supporting fishing communities). Various technologyenabled teaching methods will also be trialled.
 - » The pilot programmes will also assist the Department and the QCTO to explore opportunities for the delivery of CET skills and occupational programmes, based on qualifications already established.
 - » The Department has earmarked for piloting five CLCs at each of eight current CET colleges (or 40 CLCs altogether), which means that, together with existing pilots at 12 CLCs in Gauteng, a total number of 52 CLCs are to be piloted. These pilots will run for five years.
 - » Over each of the four Medium-Term Expenditure Framework (MTEF) periods from 2020 through to 2030, the Department will establish or declare three fully fledged CET colleges. These 12 colleges, together with the existing nine colleges, will result in the 21 colleges envisaged for 2030.
 - » Funding and partnerships to initialise, operationalise and sustain the pilots will be provided by the DHET, other government departments, the SETAs and the National Skills Fund (NSF).
 - » CET teaching staff who will teach in the pilots will be carefully selected and capacitated.

Shared learning resources

- All learning materials developed using public funds will be made available as open educational resources (OERs), and the Department will support interventions in the design and development of high-quality learning resources that will be shared as OERs.
- The Department will develop an open licensing framework, with provision for the dissemination, adaptation and use of education resources developed using public funds, within an overarching policy framework on intellectual property rights and copyright in the PSET system.
- The Department will pursue opportunities to access electronic resources, including open-source software and shared software licences, in partnership with the relevant organisations, wherever possible.

Financial planning

- In order to ensure that all PSET funding sources and frameworks, cohere, align and work together for the development and stability of the system, government will provide baseline funding for all public PSET provider institutions, and funding from the skills development levy (SDL) will complement this.
- Funding from the SDL will also continue funding learners at private providers.
- The Department will build stronger relationships and partnerships with the private sector, foundations and other relevant organisations that can support it with funding to build a stronger and more effective PSET system.
- Funding from the fiscus will be aligned with levy funding to support WPBL.

Academic and enrolment planning

- The Department will provide information on and insight into skills needs through a research programme on labour market intelligence in order to improve the responsiveness of the PSET system to the world of work.
- SETAs have an important role to play in providing the funding to plan and develop work-integrated learning platforms that enable structured work-integrated learning, including effective mentoring and assessment. Clinical training in the medical and nursing fields is a model that is already in place and funded. Similar types of platforms will be developed across the system, especially for training in areas that can have important social or economic impact for example practice teaching platforms (through the development of teaching schools and professional practice schools in collaboration with the DBE and the professional body, the South African Council for Educators); platforms for agricultural training on farms for a range of skills, from basic farmer training through to agricultural extension officers; various platforms for engineering to enable effective work integration during the candidacy phase towards registration with the professional body; etc. The currently disjointed range of initiatives will be streamlined to ensure better-aligned processes.
- The DHET will work with institutions and quality councils to ensure that qualifications and related curricula are in place to produce the full range of programmes for occupations in high demand, and that these are embedded within the enrolment planning processes for each sector. The responsibility for developing detailed curricula and materials for public and private providers in the TVET and CET sectors will remain at a national level, supported by the Department. Higher education providers will be responsible for developing curricula and materials for programmes offered at universities and higher education colleges.
- In liaison with the Department of Basic Education (DBE), QCTO, SAQA and Umalusi, the DHET will review all NQF Level 4 general vocational qualifications (including their purposes, design, curricula, streams, teaching expertise required, and locations of offering), and in the process also:
 - consider issues of alignment and articulation between the DBE's three-stream (academic, technical occupational, and technical vocational) schooling model, and current and proposed future TVET qualifications;
- » address overlaps between the National Certificate Vocational (NCV), offered at TVET colleges, and the National Senior Certificate, or the NSC (Technical), offered at schools, particularly technical schools;
- » examine the scope and articulation possibilities of the DBE's second-chance programmes, in themselves and in relation to the General Education and Training Certificate for Adults (GETCA) and the National Senior Certificate for Adults (NASCA); and
- » assess current and planned capacity to offer these qualifications in schools, CET and/or TVET colleges.
- In line with the National Skills Development Plan (NSDP) 2030, Outcome 4, which aims to increase access to occupationally directed programmes:
 - » The occupational qualification sub-framework will be revised to define the parameters of each occupational qualification type (i.e. purpose, credits, etc.).
 - » The Department will engage intensively with the QCTO as to what *should* and *should not* be specified in qualification documentation in order to support the delivery of occupational certificates.
 - » The Labour Market Intelligence Unit (LMIU) will maintain and update the list of occupations in high demand every two years, and both suggest and be responsive to the possibility of additional occupational areas and qualifications.

Data improvements

 The data verification process jointly under way between the Department, SAQA and the CHE to ensure alignment of qualification nomenclature and terminology on the National Learner Record Database (NLRD), and to correct all administrative errors with respect to the registration of accredited programmes, will be replicated for TVET and CET.

SETAs have an important role to play in providing the funding to plan and develop work-integrated learning platforms that enable structured work-integrated learning, including effective mentoring and assessment.

- All PSET provider institutions will be required to document registration and qualification outputs using unit record data with ID or passport numbers, to facilitate tracer studies of students both within and outside the PSET system.
- All PSET provider institutions will be required to collect baseline data prior to implementing interventions in the Plan, to better measure outcomes and impact.
- The DHET's administrative higher education management information system (HEMIS), technical and vocational education and training management information system (TVETMIS), sector education and training management information system (SETMIS), higher education quality committee information system (HEQCIS), private college education and training management information system, and community education and training management information system (CETMIS) should be linked, in conjunction with the IIDSP's effort to develop a fully integrated national data system, so as to enable better information management, tracking of students and staff in the public system, and for better planning, tracking and funding of students.
- The Department will standardise the coding, categorisation and reporting of impairments to collect accurate data on students with disabilities and improve evaluation and service delivery for people with disabilities across the PSET system.
- The submission and collection of enrolment and other data from PSET institutions, both public and private, will be streamlined and simplified to ensure credible and usable data. In particular:
 - » all private post-school provider institutions will be required to submit relevant data, and DHET capacity to collect, process and analyse such data will also be improved;
 - » SETA record-keeping capabilities and student data management will be improved and rendered more complete through IT shared services;
 - » reporting from employers will be streamlined and rendered less cumbersome to ensure credible data on supply and demand; and
 - » a Central Applications Service (CAS) will be established to provide an affordable facility for students to apply for study opportunities at all public PSET provider institutions.

Evidence-based planning

- The Department will improve evidence-based planning, implementation and monitoring by finalising for implementation the system's M&E framework. All PSET institutions must improve their M&E capacity.
- Impact evaluations will be designed at the outset and conducted for interventions outlined in the Plan.

Outcome 1.3: A simplified NQF

The NQF needs to be rendered simpler and more straightforward, with less overlap and duplication, to contain a greater proportion of useful, relevant and articulated qualifications, particularly but not only regarding occupational qualifications. Accordingly, and in line with the White Paper, the NQF and the NQF Act must be reviewed to ensure this outcome. The Skills Development Act (SDA), the Community Education and Training Centres Act and the Higher Education Act may also have to be reviewed to ensure full alignment. The Department will work together with SAQA and the quality councils to address all NQF-related issues, including, inter alia:

- The development of policies on NQF matters.
- The simplification of qualification nomenclature and alignment with terminology used in the system (see Table 2).
- Every programme has its own purpose that is linked to specific knowledge/practice areas/fields. And it is in the design of the programme and qualification that the articulation pathways are made visible and practical so that links can be made between cognate knowledge/practice areas/fields.
- There are three main purposes for qualifications: general academic (formative leading to qualifications for people who want to become philosophers, economists,

historians, natural scientists, fine artists, performing artists, researchers, etc.); professional (leading to careers such as teacher, social worker, professional registered engineer, medical doctor, engineering technologist, chartered accountant, lawyer, etc.); and occupational (leading to careers such as artisan, electrician, plumber, caregiver, etc.).

TABLE 2: Proposed revised NQF with aligned qualification nomenclature

	Purpose and qualifications			
	General academic	Professional (technical/vocational)	Occupational (vocational/technical)	
10	Doctor of Philosophy (PhD)	Professional Doctorate		
9	Masters	Professional Masters		
8	Honours	Postgraduate Diploma Professional Bachelor's Degree	Specialised Occupational Diploma	
7	General/Formative Bachelor's Degree	Advanced Diploma Bachelor of Education Bachelor of Technology	Specialised Occupational Certificate	
6		Diploma	Advanced Certificate	
5			Higher Certificate	
4	National Senior Certificate (NSC) National Senior Certificate for Adults (NASCA)	National Certificate Vocational (NCV) National Senior Certificate (NSC)	National Occupational Certificate (NOC)	
3			Intermediate Certificate	
2			Elementary Certificate	
1	General Education and Training Certificate for Adults (GETCA) General Education and Training Certificate (GETC) Basic Certificate			

The standardisation and alignment of credits awarded to and within qualifications at specific levels, especially related to the Occupational Qualifications, need to be prioritised.

NQF sub- framework/ quality council	NQF level	NQF sub-framework and qualification type		NQF sub-framework/ quality council
	10	Doctoral Degree Doctoral Degree (Professional)		
Higher	9	Master's Degree Master's Degree (Professional)		
Education Qualifications Sub-Framework	8	Bachelor Honours Degree Postgraduate Diploma Bachelor's Degree	Specialised Occupational Diploma	
(HEQSF)/Council on Higher Education (CHE)	7	Bachelor's Degree Advanced Diploma	Advanced Occupational Diploma	
	6	Diploma Advanced Certificate	Occupational Diploma Advanced Occupational Certificate	Occupational Qualifications
	5	Higher Certificate	Higher Occupational Certificate	Sub-Framework (OQSF) Quality Council
General and Further	4	National Certificate	National Occupational Certificate	for Trades and Occupations (QCTO)
Education and Training	3	Intermediate Certificate	Intermediate Occupational Certificate	
Qualifications Sub-Framework	2	Elementary Certificate	Elementary Occupational Certificate	
(GFETQSF)/ Umalusi	1	General Certificate	General Occupational Certificate	

TABLE 3: The South African NQF levels and qualification types

The roles of each quality council need to be clear. It is proposed that, in this simplified and unified NQF, different qualifications be assigned to specific quality councils.

In the differentiated PSET system, different institutions will offer different types of programmes leading to certain qualification types. The system will provide for all purposes and needs.

Tables 4 to 7 provide the proposed qualifications to be offered by each institutional type. Through the review of the NQF Act and other Acts, these will be refined and confirmed.

TABLE 4: Qualifications to be offered by CET colleges

	Purpose and qualifications			
	General academic	Professional	Occupational	
5			Higher Certificate	
4	National Senior Certificate for Adults (NASCA)	National Certificate Vocational (NCV)	National Occupational Certificate (NOC)	
3			Intermediate Certificate	
2			Elementary Certificate	
1	General Education and Training Certificate for Adults (GETCA)			

The qualifications shown **in bold** will only be offered in the long term once CET colleges are fully operational and the system is effectively capitalised. In the initial phases (short to medium term), the qualifications **in italics** will be developed and offered.

TABLE 5: Qualifications to be offered at TVET colleges

	Purpose and qualifications		
	General academic	Professional	Occupational
6		Diploma	Advanced Certificate
5			Higher Certificate
4		National Certificate Vocational (NCV)	National Occupational Certificate (NOC)
3			Intermediate Certificate
2			Elementary Certificate

The qualifications in black (roman) in Table 5 will be the main qualifications offered at TVET colleges. The National Accredited Technical Education Diploma (NATED) qualifications will be phased out and replaced with Diplomas and Advanced Certificates. Higher Certificates will be introduced as Level 5 qualifications. The long-term future of the NCV will depend on discussions with the DBE on streamlining the qualifications offered at Level 4. The Occupational Certificates at Levels 2 and 3, will in the long term, be offered mainly at CET colleges; however, some may be offered at TVET colleges as well. A key principle is that each certificate qualifies a person for a specific occupational role. The Diploma (**in bold**) may also be offered at some colleges in the long run once their capacity to do so is developed.

TABLE 6: Qualifications to be offered at higher education colleges

Purpose and qualifications			
	General academic	Professional	Occupational
8		Postgraduate Diploma	Specialised Occupational Diploma
7	General Formative Degree	Advanced Diploma Bachelor of Education Bachelor of Technology	Specialised Occupational Certificate
6		Diploma	Advanced Certificate
5			Higher Certificate

Higher education colleges could offer the range of qualifications shown in Table 6. Most of these colleges will be private institutions. However, the first public higher education colleges, which will be specialised nursing and agricultural colleges, will initially primarily offer the qualifications shown in black (roman). Over time, they could also develop to offer relevant qualifications for the fields in which they specialise, shown **in bold**.

TABLE 7: Qualifications offered at universities

	Purpose and qualifications			
	General academic	Professional	Occupational	
10	Doctor of Philosophy (PhD)	Professional Doctorate		
9	Masters	Professional Masters		
8	Honours	Postgraduate Diploma Professional Bachelor's Degree	Specialised Occupational Diploma	
7	General/Formative Bachelor's Degree	Advanced Diploma Bachelor of Education Bachelor of Technology	Specialised Occupational Certificate	
6		Diploma	Advanced Certificate	
5			Higher Certificate	

Universities will collectively offer the full range of qualifications shown in Table 7. However, those **in bold** may slowly disappear from their offerings as the TVET colleges and higher education colleges start offering more of these qualifications. Within the university sector, different institution types (traditional universities, comprehensive universities and universities of technology) will offer different ranges of these qualifications, depending on their mandate and mission. The Higher Education Act (101 of 1997, as amended) also mentions another institutional type: the university college. This is an institution that is recognised as a potential future university. This model will be utilised to expand the public university sector, if the size and shape study for the higher education sector as a whole identifies the need.

- The quality councils, together with SAQA, will simplify the accreditation and registration processes.
- The sub-frameworks, particularly the higher education qualifications sub-framework (HEQSF) and the occupational qualifications sub-framework (OQSF), should be reviewed to ensure alignment and reduce the proliferation of programmes leading to qualifications.

Career Development Services (Khetha) must be able to provide quality career information, advice and guidance to the public on qualifications, career opportunities linked to qualifications, and articulation opportunities within the simplified NQF.

Outcome 1.4: Increased articulation for students between and within the NQF sub-frameworks, and between and within institutions

As the White Paper recognises, articulation across the PSET system is poor, with numerous unnecessary and unfair barriers to acceptance and credit transfer between levels, both vertically and horizontally, on the NQF, and between qualifications, programmes and within the same institution. Articulation must be deliberately and intentionally steered through design and instituted at all levels of the PSET system and by all PSET provider institutions working together to eliminate unnecessary barriers.

Therefore:

- A joined-up planning process between the DHET and the DBE, SAQA, CHE, QCTO and Umalusi regarding changes to higher education, TVET and CET programmes between now and 2030 will be initiated, and will require consideration of, inter alia:
 - » A change to Notice 1040 of 2012, as published in Gazette 36003 dated 14 December 2012, which determines the sub-frameworks and defines occupational qualifications as based on WPBL and a combination of three types of unit standard.

- » The development of NOCs to replace NATED (N1 to 3) programmes, with varying proportions of compulsory workplace-based training and practical training and taking into account Apprentice of the 21st Century processes.
- » The review and replacement of the N4, N5 and N6 by Higher Certificates and Advanced Certificates at NQF Levels 5 and 6.
- » A review of the 240-credit Diploma on the HEQSF and consideration of a QCTO Level 5/6 Certificate focused on practical/work-based learning that enables its articulation with the Advanced Diploma.
- When qualifications are designed and developed, planned articulation routes must be mapped out at the outset, as linked to the primary purposes of the qualifications.
- The capacity of SAQA to gather and track reliable systemic data through the NLRD will be developed. The roles of the quality councils in providing data to the NLRD will be defined and strengthened.
- The Department will investigate an integrated quality assurance and data system that spans across SAQA and the quality councils.
- The Department will investigate the establishment of a mechanism to monitor articulation blockages and make recommendations for improvement.
- A communications strategy will be implemented, focusing on developing an understanding of the NQF as a framework and what it means to articulate from one qualification to another in a cognate knowledge/practice area, etc.

Outcome 1.5: Aligned policy and legislation

Given the changes to PSET stakeholder roles and responsibilities, the NQF simplifications and qualifications envisaged above have legal implications:

- The Department will undertake a comprehensive review of policy and legislation governing the PSET system, including legislation promulgated by other government departments (such as the Health Professions Council of South Africa and the Legal Services Act), and make recommendations for their amendment, where necessary, to remove any hindrances to the implementation of the Plan.
- In particular, and in addition to any realignments to policy and legislation emanating from the joined-up planning process indicated in Outcome 1.4, the following aspects of the Plan will need policy or legislative changes:
 - » Expansion of provision of qualifications at NQF Levels 5 and 6 in TVET colleges will require amendment of the Continuing Education and Training Act.
 - » Provision of foundational learning in TVET and CET colleges (see Outcome 3.1) will need to be reflected in funding norms and frameworks.
 - » Stimulating and supporting public–private partnerships in areas of demand through fiscal funding also needs to be reflected in funding norms and frameworks.
 - » The Department's evaluation of college enrolment plans (see Outcome 2.1) will require amendment of the Continuing Education and Training Act.
 - » Enrolment planning for TVET colleges will require enrolment planning policy changes.
 - » The removal of barriers to WPBL (see Outcome 4.2) may require amendments to or alignment with the SDA, Labour Relations Act, Basic Conditions of Employment Act and Compensation for Occupational Diseases and Injuries Act, and regulations emanating from them.
 - » The clarification of the roles and responsibilities of SAQA and the quality councils will require a review of the NQF Act.
 - » The collection of unit record data will need to be aligned with the Protection of Personal Information Act.
 - » The NQF Act will be reviewed, considering the recommendations of the report of the NQF evaluation undertaken by the Department in collaboration with the Department of Planning, Monitoring and Evaluation (DPME).
 - » NQF-related policies will be reviewed.

CHAPTER

Expanding the PSET system



2.1 Introduction

The White Paper targets enrolments of 1 million students in community education and training (CET) colleges, 2.5 million in institutions offering technical and vocational education and training (TVET) programmes, and 1.6 million in higher education institutions by 2030. Given the 2017 enrolments of 258 199 CET students, 688 028 TVET students and 1.2 million higher education students, the size and shape of the post-school education and training (PSET) system will change markedly: the TVET sector will become the biggest sector, with the CET sector approaching the enrolment size of the public higher education sector. Enrolments in vocational programmes offered by public TVET colleges, private colleges and skills development providers are expected to increase considerably compared with current enrolments, in order to both expand entry-level access to the world of work in various trades and occupations and to prepare students for entrepreneurship or self-employment.

This chapter outlines strategies for expanding and diversifying the PSET system in order to: increase enrolments in all PSET sectors; simultaneously improve participation rates and render them more equitable; make student fee and accommodation costs more affordable; establish a sustainable student financial aid system; strengthen and differentiate PSET provider institutions; provide adequate infrastructure to support teaching, learning and research; and provide sufficient staff to support expansion.

The expansion of the public PSET providers will be achieved through careful, judicious and systematic enrolment planning (supported by the improved integration, coordination, simplification and articulation of the system as outlined in Chapter 1, as well as the combined impact of all elements of this Plan, such as quality provision) in line with available resources, capacity and funding. Sector-specific plans will be developed to ensure that expansion and more equitable participation are supported by diverse modes of delivery and the use of online learning, increased numbers of quality staff, affordable fees and inclusive and sustainable financial aid.

Institutional differentiation will foster a wider variety of modalities of provision, learning programmes and pedagogy to cater for diverse student and employer needs, and to permit all PSET provider institutions (public and private) to develop niche areas which respond to national development imperatives.

The need for adequate and appropriate infrastructure, essential to the achievement of White Paper goals, varies across the CET, TVET and higher education sectors. Accordingly, in the short to medium term, and informed by a national PSET infrastructure audit, infrastructure planning will primarily focus on improving efficiencies.

The White Paper targets enrolments of 1 million students in CET colleges, 2.5 million in institutions offering TVET programmes, and 1.6 million in higher education institutions by 2030.

2.2 Expanding the system

System Goal 2: Expanded access to PSET opportunities

Objective: To provide diverse students with access to a comprehensive and multifaceted range of PSET opportunities

Priorities:

- to increase enrolments in all PSET sectors;
- to improve, and achieve more equitable, participation rates;
- to make student fees and accommodation costs more affordable;
- to establish a sustainable student financial aid system;
- to strengthen and differentiate PSET provider institutions;
- to provide adequate infrastructure to support teaching, learning and research;
- to provide sufficient staff to support expansion.

Outcome 2.1: Increased enrolment in all PSET sectors

Achieving the White Paper's envisaged growth in enrolments across the PSET system to 5.1 million students by 2030 requires growth in both public and private PSET provision. In the public sector it requires, first and foremost, integrated planning for human resources, infrastructure and system-wide enrolment planning, as well as appropriate marketing, diverse learning modalities and partnerships between and within PSET sectors and institutions.

- Regarding systematic enrolment planning in all PSET sectors:
 - » The Department of Higher Education and Training (DHET) will review the enrolment planning system currently operating in the higher education sector in order for it and higher education institutions to identify, learn from and improve on what works.
 - » The Department will develop a TVET enrolment planning and Programme Qualification Mix (PQM) development policy and guidelines, based on an analysis of all TVET college PQMs as well as factors such as physical infrastructure, staff capacity, locality, surrounding industry and possibilities for workplace-based learning (WPBL). The enrolment planning will address issues of institutional diversity.
 - » CET college enrolment planning and PQM development will be shaped by the findings of the pilot process (see Outcome 1.2), the 2030 enrolment targets and the Department's 10-year cumulative annual growth projections and will also address issues of institutional diversity.
 - » Systematic enrolment planning at all levels and pertaining to all PSET sectors and institutions will inform and be informed by data collection and analysis, performance monitoring, current and projected demand, existing and required capacity, and the availability of resources and funding. The system is expected to grow slowly during the first five years of implementing the Plan, and then more quickly in the second five years as capacity is developed and resources harnessed through partnerships with the private sector as well as more efficient public spending.
- Dedicated marketing of CET and TVET colleges will be undertaken to counteract negative perceptions and to present them as PSET provider institutions of choice that provide students with real opportunities for qualifications that will lead to productive employment/self-employment.
- A capacity development programme, along the lines of that implemented in universities though the University Capacity Development Programme (UCDP), will be developed and implemented in TVET and CET colleges.

- In terms of the Policy Framework for Open Learning in the PSET system, distance, online and open learning in the higher education, TVET and CET sectors will be permitted to grow gradually, in line with demonstrable improvements in quality, success rates and institutional capacity.
- The Department will encourage partnerships between CET and TVET colleges regarding the provision of skills programmes in CET colleges, particularly where these articulate to full occupational gualifications in TVET colleges.
- The Central Applications Service (CAS), enabling students to apply for different areas of study and at a range of institutions, interoperable with the Khetha Career Development Services, will be fully operational by 2025.
- Private PSET provision will be enabled and encouraged, especially where private providers can work closely with public education and training institutions to achieve PSET objectives.
- The number of people who are funded in the public system through the skills development levy (SDL) will be increased so that more citizens are equipped with skills for sustainable livelihoods.
- Further policy on Recognition of Prior Learning (RPL) will be reviewed, considering the recommendations of the RPL reference group and the report that will be produced by the group.
- Equity, redress and diversity in student demographics at universities will be ensured through ongoing enrolment planning and other interventions (such as placement assessments, student support services and foundational programmes), with the support of the UCDP and the National Student Financial Aid Scheme (NSFAS).

Outcome 2.2: Improved and equitable participation rates

As the White Paper emphasises, the achievement of greater social justice is closely dependent on equitable access by all sections of the population to quality education, which can also provide an exit route out of poverty. The general expansion in PSET enrolments will signal an increase in participation rates, which are targeted to reach 25% across all PSET sectors by 2030. More specifically:

- Improved participation rates for various student demographics, particularly but not only for African and Coloured students and students with disabilities, will be determined as part of the enrolment planning process.
- There will be better marketing of support opportunities for students with disabilities, and improved visibility of structures that help with accessing this support.

Outcome 2.3: Affordable student fees and accommodation

Academically deserving individuals should not be denied access to PSET opportunities purely because they cannot afford to pay, and there is a need for a national and more negotiated, transparent and inclusive approach to the setting of tuition fees. Accordingly:

- As of 2019, poor and working-class students in TVET colleges and universities were receiving fee-free tuition. CET college students were not paying tuition fees.
- Building on advice provided to the minister by the Council on Higher Education (CHE), the DHET was developing an effective fee regulatory policy framework for public universities in cooperation with Universities South Africa (USAf), to be put in place in 2022.
- The Department is exploring viable public–private partnerships, as well as alternative building methodologies which are energy-efficient and have lower maintenance costs, to increase availability of and access to affordable student housing (see Outcome 1.2).

Outcome 2.4: A sustainable student financial aid system

As part of the development of a comprehensive student funding mechanism which makes education and training financially accessible for potential students, and which prioritises poor, working-class and 'missing middle' students:

- The free, full cost of study, education and learning support materials is being phased in over the 2018–2022 period for university and TVET college students from poor and working-class backgrounds.
- A comprehensive student funding model to support all students who require financial assistance, including the 'missing middle' students, must be developed.
- The cost-sharing funding model for higher education will continue, and students who can afford tuition fees and access non-state funding for higher education must continue to pay fees.
- In collaboration with other institutions, the DHET will develop multipronged funding strategies for the inclusion of people with disabilities in the PSET system, including revised NSFAS funding procedures for students with disabilities at TVET colleges.

Outcome 2.5: Strengthened institutional differentiation

Institutional differentiation in the PSET system will be strengthened and developed through the following strategies:

- CET colleges will be differentiated in light of the findings of the pilot process (see Outcome 1.2) and also taking account of:
 - » size (i.e. small, medium and large CET colleges), with student enrolments for each size of college determined by the Department;
 - » geographical spread, with the number of college Community Learning Centres (CLCs) or satellite centres varying according to distances between municipalities, population densities and programme demand; and
 - » programme offerings, the number and type of which will be determined primarily by local context, need and capacity.
- TVET colleges will be differentiated in the extent to which they respond appropriately to widely divergent community, local, regional and national developmental needs and demand. This will be supported by several partnership arrangements with employers in niche areas. Further:
 - » Based on their proximity to particular industries, selected TVET campuses will be developed to become Centres of Specialisation which offer trade and occupational qualifications specific to their localities and/or which are required for the implementation of the National Infrastructure Plan and the National Development Plan (NDP).
 - » In other instances, such as in contexts where colleges are sparsely spread, or transport and accommodation are limited, TVET colleges or campuses will need to be multi-programmatic.
 - » More generally, innovation should drive differentiation: where capacity exists, TVET colleges will be empowered to use information and communications technology (ICT) and open educational resources (OERs) appropriately in teaching and learning, apply diverse modes of delivery, supply niche skills and offer programmes on demand.
- Higher education institutions will be differentiated by extending and developing existing steering (planning, funding, monitoring and quality assurance) processes, in terms of the differentiation framework outlined in the White Paper:
 - » by mandate (informed by institutional type, i.e. traditional university, comprehensive university, university of technology or higher education college); and
 - » by institutional mission (informed by each institution's: location, positioning and distinct niche locally, regionally, nationally on the continent, and internationally; scope of involvement in undergraduate and postgraduate studies, research and

open and distance education; infrastructural needs; and possibilities for new or strengthened teaching, learning, research, support, engagement, collaboration and partnerships).

- The Department will negotiate and publish formal six-year agreements (two threeyear rolling cycles, with a mid-term review) with each public university and higher education college, setting out their distinct institutional missions and scope of activities in accordance with institutional differentiation.
- Funding and funding frameworks will be adjusted where necessary, and possibilities for joint funding with other government departments (such as Science and Innovation [DSI]) investigated, to ensure adequate support for strengthened institutional differentiation.
- Reporting and performance monitoring will continue as per existing regulation processes, supplemented by an explicit set of indicators to strengthen institutional differentiation.
- The Department will develop strategies to promote and support greater levels of intra- and inter-sector and regional collaboration.
- The Department will continuously assess the entire PSET system (also considering the contributions of private PSET provider institutions) with a view to identifying areas for potential institutional or campus repurposing and promoting opportunities for collaboration.
- The Department will produce a report on the overall PSET institutional landscape and its contribution to human capacity development, knowledge production and engagement with the broader development imperatives of the country.

Outcome 2.6: Adequate infrastructure to support teaching, learning and research

The following strategies will support provision of adequate infrastructure for the PSET system, with emphasis on making better use of what is available:

- Infrastructure development will prioritise existing projects and agreements, infrastructure maintenance backlogs, remodelling and modernising existing infrastructure, student housing projects, and selected new developments in line with integrated planning for a purposefully differentiated PSET system.
- All construction and infrastructure projects, including ICT infrastructure, will be guided by the Macro Infrastructure Framework and infrastructure management guidelines (see Outcome 1.2).
- The provision of new CET campuses, where necessitated by increasing enrolments and programmes, will be complemented by the identification and repurposing of unused or underutilised government-owned buildings.
- The development of e-learning, workshop and work simulation infrastructure and equipment for all PSET institutions, particularly TVET colleges, will be linked to overall PSET enrolment planning and PQM processes.
- Improved timetabling at all PSET provider institutions will ensure more efficient utilisation of available spaces from morning to evening and during weekends.
- Where possible, the DHET, with the help of the sector education and training authorities (SETAs), will incentivise private providers and/or workplace providers that can make infrastructure (e.g. training spaces) available to TVET colleges.
- Connecting all TVET college campuses through the TVET College Connectivity Project into the National Research and Education Network (SANREN) and completion of the rural university campus connectivity project will take place as planned and will bring significant ICT infrastructural improvements to the TVET and higher education sectors by 2021 and to CET colleges as they are built and developed.
- Work will be done to reduce the cost of data for access to online resources.

The development of e-learning, workshop and work simulation infrastructure and equipment for TVET colleges will be linked to overall PSET enrolment planning and PQM processes.

Outcome 2.7: Sufficient staff to support expansion

Rapidly expanding student numbers need to be matched by an increase in the number and improved capability of teaching staff across the PSET system, which will be informed by the following strategies:

- The number of teaching and support staff required for effective and successful CET colleges, including the relative need for and numbers of permanent and short-term contract staff and whether and how CET staffing arrangements differ from other PSET provider institutions, will be informed by the findings of the CLC pilot programmes together with the Policy on Staffing Norms.
- Appropriate staff numbers for effective and successful TVET colleges will be determined at sector level as part of operational planning.
- Partnerships will be developed for a clear understanding of the the impact of opportunities arising from technological and digital advancement, also known as 4IR or the Fourth Industrial Revolution, to prepare for this collectively and strategically.
- Research into optimal lecturer-student ratios across different academic fields of study will be undertaken with a view to improving student success.
- The Department will explore possibilities for collaboration between local PSET teaching staff and South African educators in the diaspora (turning brain drain to brain gain and brain circulation) to strengthen teaching, research and engagement.
- A recruitment strategy to encourage high-achieving postgraduate students to consider an academic career will be developed and implemented.
- Alignment between the National Research Foundation (NRF)/DSI and DHET programmes for the development of career academics and researchers must be done to ensure effective utilisation of resources.

CHAPTER



Improving the responsiveness of the PSET system



3.1 Introduction

As the White Paper points out, the post-school education and training (PSET) system is a centrally important institutional mechanism established by society and must be responsive to society's needs.

This chapter outlines strategies for improving the responsiveness of the PSET system by developing, offering, and developing capacity to offer a diverse range of programmes and mechanisms relevant to locality and responsive to community needs, the world of work and the research and innovation system.

PSET curricula, programmes and qualifications, especially but not only for technical, vocational and occupational purposes, need to be reviewed and developed so as to ensure that they respond adequately and flexibly to the multiple and diverse needs of citizens, employers and society at large. It is also necessary to better prepare and support students to access and articulate across and between different PSET fields, programmes and institutions.

Improved responsiveness also entails developing a better understanding of demand and supply, which in turn requires enhanced liaison and engagement with communities at local, regional and international levels, as well as socially responsive research, collaboration, partnerships and capacity building.

In this light, too, better data gathering, analysis and application will enable PSET institutions as well as government more generally to foster the development of a highly skilled and capable workforce which can support an inclusive growth path, improve the country's global economic position and grasp the opportunities of technological and digital advancement (4IR).

As the White Paper indicates, innovation should not be confined to universities or theoretical research but ought also to take place, and be supported, in applied and practical forms across the system, including teaching and learning. For instance, by their very proximity to selected industries and to other institutions, certain PSET provider institutions have great potential not only to produce more of the critical and scarce skills needed by the economy, but also to be in the forefront of technological innovation and cooperation. To this end, improved responsiveness must be fostered between inter-, intra- and extra-PSET institutions, sectors and the system.

3.2 Improving responsiveness

System Goal 3: A responsive PSET system

Objective: To provide qualifications programmes and curricula that are responsive to the needs of the world of work, society and students

Priorities:

- to offer a diverse range of qualifications relevant to locality and responsive to community needs;
- to offer a diverse range of programmes responsive to the world of work;
- to provide a diverse range of mechanisms to improve research, innovation, commercialisation and entrepreneurship in higher education;
- to offer programmes that prepare students for global advances in technology.

Outcome 3.1: A diverse range of qualifications relevant to locality and responsive to community needs

Developing PSET programme relevance and responsiveness to locality and community needs will involve the following strategies:

CET colleges

- Four broad types of programmes will be offered through community education and training (CET) colleges and their Community Learning Centres (CLCs) (see Table 4 in Chapter 1):
 - » skills/occupational programmes with a high practical component, to enable people either to gain formal employment, or for entrepreneurship or self-employment, or to study further at a technical and vocational education and training (TVET) college;
 - » community education programmes (some of which may be formal, accredited qualifications) to promote community development in areas such as health, child care, financial management, conservation and citizenship;
 - » general or academic programmes, particularly the General Education and Training Certificate for Adults (GETCA) and the National Senior Certificate for Adults (NASCA), which will include foundational skills in mathematics, science and language and thereby articulate to occupational certificates and Level 5 programmes offered by other PSET institutions (particularly but not only TVET colleges); and
 - » foundational learning programmes, which will not necessarily constitute a formal qualification and will provide a range of support necessary for all students entering CET colleges.
- In the long term, and considering demand, capacity and resources, CET colleges should also position themselves to offer programmes at other levels of the National Qualifications Framework (NQF) (such as Higher Certificates).
- CET colleges will work with community development workers to collect information from communities about their education and training needs and the level of demand.
- CET colleges will conduct audits of local skills programmes and community programmes to determine possibilities for programme development and partnerships.

The CHE will be requested to advise on policy guidelines and reporting requirements for community engagement, as well as develop mechanisms for monitoring and measuring such engagement, by drawing on, among others, the South African Higher Education Community Engagement Forum.

TVET colleges

- TVET colleges will offer four broad types of programmes (see Table 5 in Chapter 1), namely:
 - » general vocational programmes, particularly the National Certificate Vocational (NCV);
 - » skills/occupational programmes (leading to employment in trades, occupations or professions), mostly at national certificate level (National Occupational Certificates, or NOCs), which will become the primary TVET offerings;
 - » higher certificate programmes, currently offered by some TVET colleges in partnership with universities, which will be offered by colleges on their own when the capacity to do so has been fully developed; and
 - » foundational learning programmes, to provide students with the foundational knowledge necessary to access other TVET programmes, considering their prior educational experience and performance (see Outcome 3.2).
- Over the longer term, as TVET colleges develop the capacity, they should also offer Advanced Certificates (NQF Level 6) and Diplomas (NQF Level 6).
- The Department will work with colleges to develop the capacity of TVET college academic boards to provide oversight on enrolment planning and Programme Qualification Mix (PQM) development.
- From 2020, the Department will commence with the review and approval of each TVET college's proposed PQM to ensure responsiveness and effective differentiation.
- A joined-up funding strategy, which will consolidate programme funding processes from government, industry, the sector education and training authorities (SETAs) and the National Skills Fund (NSF), will be developed to ensure that all required TVET programmes are effectively funded.

Higher education institutions

- Higher education colleges, the first of which will be nursing and agricultural colleges, will initially offer three types of qualifications: Higher Certificates, Diplomas and Advanced Certificates. Over time, they can offer Level 7 and 8 qualifications when they have developed the capacity to do so (see Table 6 in Chapter 1).
- Universities will continue to offer three broad types of undergraduate programmes (see Table 7 in Chapter 1):
 - » general academic programmes, leading to general degrees such as BA, BSc and BCom;
 - » professional programmes, leading to professional qualifications in areas such as medicine, law and education (e.g. MBChB, LLB and BEd); and
 - » career-focused programmes, leading to qualifications with a distinct vocational or technical focus (e.g. BTourism or BEngTech).

All three of these programme types also incorporate foundational or extended curriculum programmes which support the development of students' foundational knowledge.

- Universities will also offer postgraduate programmes research-focused and professional.
- The Department will continue to support, and seek to incentivise, university Higher Certificate programmes offered in partnership with TVET colleges, especially in occupational fields that allow students to articulate directly into both workplaces and higher education.
- Institutions will be encouraged and supported to develop and strengthen their engagement policies and strategies (e.g. service learning, engaged scholarship, participatory research, clinical service and institution-community-industry-NGO partnerships and collaborations). To this end:
 - » The Council on Higher Education (CHE) will be requested to advise on policy guidelines and reporting requirements for community engagement, as well as

develop mechanisms for monitoring and measuring such engagement, by drawing on, among others, the South African Higher Education Community Engagement Forum.

- » Community engagement should wherever possible be integrated into the teaching, learning and research components of programmes and institutions with a view to building civic consciousness and critical citizenship among the students and staff of the institution as well as among the communities with which they engage.
- » University engagement with and support for other PSET provider institutions (particularly in the TVET and CET sectors) should also be considered part of their engagement role.
- » The CHE will also advise on ways of stimulating the sharing of engagement criteria, guidelines and good practices in institutions and at a national level, including a possible national awards system and specific forms of funding.
- » Further research should be undertaken into the concept and practice of engagement provincially, nationally and internationally.
- Education precincts and other collaborative initiatives to ensure better resource and infrastructure sharing across the PSET system are in the planning stage, and it is anticipated that public universities will play a critical role in leading and supporting these initiatives (see Outcome 1.2).
- In line with its Internationalisation Policy Framework for higher education, which will be implemented as part of this Plan, the Department will:
 - » seek to broaden outbound scholarship and academic exchange opportunities for South African students, particularly at postgraduate level, and improve staff quality and qualifications;
 - » continue to encourage and monitor the inclusion of foreign postgraduate students in public universities; and
- » encourage international partnerships between institutions, including offering joint degrees linked to joint research programmes that build the research capacity and capability of public institutions and their international standing.

Outcome 3.2: A diverse range of programmes responsive to the world of work

The Labour Market Intelligence Unit (LMIU) will play a key role in providing data on demand to all sectors for enrolment planning. The strengthening, streamlining and further development of PSET programmes and qualifications, in order to render them more responsive to the knowledge and skills needs of South African society and industry, and thereby prepare students for employment or self-employment, require a few investigative, analytical and evaluative endeavours.

CET colleges

- CET colleges will analyse municipal Local Economic Development (LED) plans so as to assess the demand for skills and determine (and if necessary develop) programme offerings accordingly, also taking into account demand and supply data and analysis from the LMIU.
- Some Level 2 and 3 qualifications quality-assured by the Quality Council for Trades and Occupations (QCTO) will also be offered in CET colleges, if they have the capacity, in order to provide articulation possibilities both to entry-level employment and to further education in TVET colleges.
- Depending on the findings of the pilots, opportunities may exist for CET colleges to collaborate with other government departments for mutual benefit by providing skills development programmes aligned to national social and economic development programmes like the Expanded Public Works Programme (EPWP), the Community Development Works (CDW), smallholder development, fisheries and cooperatives (see Outcome 1.2).

TVET colleges

- The QCTO and the South African Qualifications Authority (SAQA) will review all NQF Level 2 and 3 Certificates and NQF Level 4 NOCs with respect to the relative proportions of their theoretical, practical and workplace experience components, and whether in some cases simulated workplace experience would constitute an appropriate and feasible substitute for actual workplace experience. This would require an amendment to the Skills Development Act (SDA) definition of occupational programmes.
- The Department will investigate the need to develop new Higher and Advanced Certificates for various occupations to cater for Grade 12 learners who achieved the the National Senior Certificate (NSC) and others who meet their admission requirements, and, if feasible, to adapt current legal frameworks to allow such certificates to be offered independently at TVET colleges (where capacity exists or is developed).
- The Department has designed and will pilot foundational programmes (in the form of a flexible set of non-stand-alone modules) intended to enable TVET students to access the full range of TVET programmes, and which, apart from language, science and mathematical skills, should include life skills such as time management, IT and communication skills, and work-readiness.
- The Department is introducing Centres of Specialisation in selected TVET colleges, each initially focused on one or more of 13 priority trades, and thereby responding to the demand for skills to implement the National Infrastructure Plan and the National Development Plan (NDP), as well as for skills in general. The skills offered at these centres will eventually expand beyond the initial 13.
- The Department is also working on several other partnership initiatives to ensure quality provision that is integrated with the workplace. These will continue to be 'tested' and, where they are able to contribute to the growth and quality of the system, will be expanded. This includes partnership efforts such as those with the manufacturing industry, installation repair and maintenance, dual apprenticeship programmes, etc.
- The Department will assist TVET colleges to develop tracking systems to follow students throughout their studies (to enable effective student support) and, after completion, into the world of work (to monitor graduate destinations).
- Occupational programmes will be responsive to global technological advancements.

Higher education institutions

- The Department of Higher Education and Training (DHET) will review the guidelines and processes for enrolment and PQM planning to ensure that they are clear and responsive to the changing national and global context, and to this end will engage with universities through the enrolment planning process.
- Support will be provided for developing programmes and curricula that develop human resources in national priority areas.
- Public universities, in accordance with the joint DHET/Department of Basic Education (DBE) Integrated Strategic Planning Framework for Teacher Education and Development and other cooperative mechanisms, will continue to work towards the effective production of quality lecturers for the country's entire educational system, including initial teacher and lecturer education, and professional development initiatives for schools and TVET and CET colleges, based on research into educational supply and demand imperatives.
- Higher education colleges, such as nursing and agricultural colleges, with strong direct links to the world of work will offer a diverse range of programmes that will be vocationally/occupationally oriented in order to develop graduates with knowledge and skills relevant to their specific sectors, such as the health and agricultural sectors.

Outcome 3.3: A diverse range of mechanisms to improve research, innovation, commercialisation and entrepreneurship in higher education

The quality of the research and innovation system can be substantially improved through greater policy coherence, collaboration and efficiencies:

- The DHET, the Department of Science and Innovation (DSI) and the Department of Trade and Industry (DTI) will establish a formal collaborative mechanism for purposes of better aligning research and innovation policies, plans, targets and monitoring of effective delivery.
- Universities will be supported to develop programmes which provide skills for the research and innovation system, informed by data from the LMIU and national priorities.
- The Department, in liaison with the DSI and the National Research Foundation (NRF), will further promote institutional differentiation through identifying national and international centres of excellence in research and innovation.
- The NSF will be encouraged to fund and support research and innovation which cuts across PSET sectors, such as public–private partnerships between TVET colleges, universities of technology, private providers and industry in areas such as engineering, IT, agriculture, minerals and materials beneficiation, and other forms of applied research.
- Partnerships with key stakeholders will be established to enable the implementation of joint initiatives to strengthen linkages between research, innovation, entrepreneurship and commercialisation in higher education.
- The Entrepreneurship Development in Higher Education Programme will be implemented to build an entrepreneurship system in universities focused on developing student entrepreneurship, entrepreneurship in academia, and entrepreneurial universities.
- The Department will work with the DSI and the NRF to align programmes that are being implemented to promote research, innovation and commercialisation in universities, and to enable joined-up funding for these initiatives in order to maximise impact.

Outcome 3.4: Programmes that prepare students for global advances in technology

PSET provider institutions will ensure that their programmes, curricula and teaching and learning approaches are geared to opportunities arising from technological and digital advancement (4IR) so that graduates are exposed to and can contribute to implementing and further developing emerging 4IR technologies such as automation, digitisation, robotics, artificial intelligence, machine learning, and the internet of things. They will also develop partnerships for a clear understanding of the impact of 4IR to prepare for this collectively and strategically.

Partnerships with key stakeholders will be established to enable the implementation of joint initiatives to strengthen linkages between research, innovation, entrepreneurship and commercialisation in higher education.

CHAPTER

Improving relations between education and training institutions and the world of work



4.1 Introduction

The White Paper sets out a policy vision for a stronger and more cooperative relationship between post-school education and training (PSET) institutions and the workplace, a key aspect of provision that requires better coordination in order to bridge the chasm between theoretical and practical knowledge and skills.

In line with this vision, this chapter outlines strategies for greater cooperation between PSET provider institutions and the world of work, with a specific focus on the connections and interactions between provider institutions and skills levy institutions, and between provider institutions and employers, particularly but not only for workplace-based learning (WPBL) purposes and for strengthening research and innovation.

These strategies include refocusing the roles and responsibilities of the sector education and training authorities (SETAs) and making more cost-effective use and sharing of their resources. They also require the much closer integration of all skills levy institutions, with their funding mechanisms, with the planning, coordinating and provisioning aspects of the system.

Strengthening WPBL at system and institutional levels, as well as encouraging employers to participate therein, will help to improve education and employment outcomes, as will greater industry involvement in the financing of research and development and in developing partnerships and promoting synergies with higher education institutions and research councils.

Not least, PSET provider institutions must be assisted to drive innovation that addresses industry and community challenges. Cooperation between lecturers and researchers in PSET provider institutions, and between employers, planners and practitioners in the wider world of work, will be supported.

The strategies in this chapter are in line with the National Skills Development Plan (NSDP) 2030.

$4.2 \ \ \, \text{Linking education and training institutions and the world of work}$

System Goal 4:	Improved relations between education and training institutions and the world of work	
Objective:	To nurture a stronger and more cooperative relationship between education and training institutions and the workplace	
 Priorities: to improve the interface between PSET providers and skills levy institutions; to improve links between PSET providers and employers for WPBL; to improve links between PSET providers and industry to strengthen research and innovation; 		

• to build strong cooperative relations between employers and PSET providers.

The White Paper sets out a policy vision for a stronger and more cooperative relationship between PSET institutions and the workplace.

Outcome 4.1: Improved interface between education and training institutions and skills levy institutions

The skills levy institutions have a critical role to play in linking education and training institutions with the world of work, and accordingly must be more closely integrated with the system of provision. The following strategies to improve the links between education and training institutions and skills levy institutions are consistent with the NSDP:

- SETAs will:
 - » engage with workplaces to collect data on the skills of their existing workforce as well as their projected skills needs;
 - » engage with stakeholders (including but not only employers, labour and government) to ascertain their perceptions of future trends in their sectors and the implications thereof for the demand for and supply of skills;
 - » report such data and trends to the Labour Market Intelligence Unit (LMIU) to inform enrolment planning processes;
 - » support implementation of enrolment plans through funding. They will also be guided by the Department to use LMIU data to encourage employer and labour voice and participation in verifying occupations in demand, and to encourage partnerships between institutions and workplaces and between public and private providers, especially but not only regarding WPBL opportunities;
 - » standardise their timelines, with clear milestones for: reaching sector agreement about occupations required for economic growth and employment and social development; issuing requests for programme proposals; determining funding for provider capacity development; and awarding grants to workplaces and education and training institutions;
 - » SETA and National Artisan Moderation Body (NAMB) quality assurance functions are being integrated into the Quality Council for Trades and Occupations (QCTO), as stipulated by the White Paper and NSDP 2030, and SETAs are henceforth responsible for workplace assessment (vetting).
- The funding allocation of the skills levy, as well as the fiscal allocation, will be reviewed, considering these quality assurance function shifts, to enable the QCTO to fulfil its mandate and to facilitate longer-term system planning.
- SETA and National Skills Fund (NSF) planning cycles will be aligned with the Medium-Term Strategic Framework (MTSF) five-year and the Medium-Term Expenditure Framework (MTEF) three-year cycles.
- The Department will undertake a three-year review of each SETA's contribution to the intended objectives of the system (and the National Development Plan, or NDP, in particular) and on this basis determine future budget and planning adjustments.
- Until it has developed its own capacity, the Department and skills levy institutions will
 continue to partner with higher education institutions and research institutions to
 undertake the analysis of Workplace Skills Plans and to augment and inform their
 Sector Skills Plans based on empirical research.
- A system of shared SETA services will be established (particularly but not only in IT, human resources and regional offices) to promote a more efficient and cost-effective use of resources. To this end, the Department will, as an immediate priority, develop a business case for shared services, outline provisions for the appointment and remuneration of SETA staff, and commence work on standardised systems for application, grant disbursement, workplace approval and data management.

Outcome 4.2: Improved links between education and training institutions and employers for WPBL

Education and employment outcomes improve when linked to quality WPBL. It follows that strengthening such learning as well as strategies to improve employer participation therein are critical.

- Programme design processes will be restructured and streamlined to be more efficient and relevant and less time-consuming for all concerned, including employers and students. Accordingly:
 - » Employers and professional bodies need to be involved in decision-making about WPBL processes and, where necessary, supported to ensure that WPBL is optimally managed and delivered.
 - » The duration of WPBL must allow for authentic learning to take place and for employers' and students' interests to be addressed.
 - » WPBL requirements may differ between programmes and can range from real workplace experience (e.g. essential for civil engineering, teaching, health and some hospitality programmes) to simulated work experience laboratories, virtual reality experiences, augmented reality and technical workshop experiences.
- A systemic planning and advocacy strategy will be developed by the Department, supported by the QCTO and the Council on Higher Education (CHE), to improve and increase WPBL opportunities and partnerships across the system.
- Institutional capacity will be improved by dedicating adequate numbers of qualified staff to WPBL support and partnership functions, and by integrating WPBL continuing professional development into the performance requirements of all lecturers teaching technical, vocational and professional qualifications.
- Employers will be better supported in WPBL through the offering of high-quality training for workplace supervisors and mentors to ensure the best possible workplace learning experiences for students.
- Quality assurance arrangements will be clarified to accommodate different types of WPBL, focusing on assessment where WPBL is linked to a qualification, or focusing on work-readiness where it involves internships (which should also link to professional registration).
- Incentives in the form of the existing Employment Tax Incentive, which enables workplaces to absorb new entrants for workplace experience, will be sustained, and the tax allowance for learnerships and apprenticeships will be extended to include new occupational qualifications. The use of learnerships to enable higher education qualifications to be awarded needs to be reviewed with a view to simplifying the process and enabling the tax incentives without an additional burden on institutions and the quality councils.
- Moreover, in conjunction with comprehensive enrolment planning, restructured funding formulae for public colleges and universities will allow for joined-up funding between the skills levy support and funding from the fiscus for WPBL purposes. The Department of Higher Education and Training (DHET) and the Department of Trade and Industry (DTI) have also agreed to recognise WPBL within the Broad-Based Black Economic Empowerment (B-BBEE) Codes.
- WPBL-related policies and legislation (such as what the Labour Relations Act and the Compensation for Occupational Diseases and Injuries Act say about the status of students in the workplace) will be brought into alignment through an interministerial committee with the Department of Employment and Labour (DEL) coupled with inputs from the National Economic Development and Labour Council (NEDLAC). More generally, via the SETA shared services system, processes for registering, administering and reporting on WPBL will be simplified and streamlined. Learnership terminology like 'candidacy' and 'internship' will be clarified.

Employers will be better supported in WPBL through the offering of high-quality training for workplace supervisors and mentors to ensure the best possible workplace learning experiences for students.

Outcome 4.3: Improved links between education and training institutions and industry to strengthen research and innovation

Constraints on public funding have accentuated the need for improved links between education and training institutions and industry to strengthen research and innovation, and simultaneously to understand and attend to industry needs, earn third-stream income and improve graduate exposure to and absorption into industry. Given this:

- The Department will strengthen linkages with the Technology Innovation Agency (TIA), the Small Enterprise Development Agency (SEDA), the National Research Foundation (NRF), Universities South Africa (USAf) and other government departments such as Trade and Industry and Small Business Development to enable the implementation of joint programmes to build innovation, technology transfer and commercialisation capacity and outputs in universities, under the ambit of the Entrepreneurship Development in Higher Education Programme.
- The NRF's draft framework for engaging industry (with its two prongs of Joint Research Chairs and/or centres of excellence, and human capacity development through scholarships and internship exchanges) will form the basis for dedicated efforts to improve industry–university partnerships.
- Technology transfer and commercialisation capacity in universities will be strengthened through capacity enhancement programmes, data collection on technology transfer and through linkages with TIA, the NRF and sister government departments, under the umbrella of the Entrepreneurship Development in Higher Education Programme.
- Industry–university partnerships will be strengthened in order to leverage angel and venture capital investment to take university-generated intellectual property to the market.

Outcome 4.4: Strong cooperative relations between employers and education and training institutions

Education and training institutions and employers, as well as academics and practitioners and scholars and their communities, need to engage, plan and innovate more collaboratively in order to address both local and national developmental challenges.

- The Human Resource Development Council (HRDC) will facilitate and support partnerships between stakeholders to address development challenges.
- The DHET will encourage stakeholders to establish repositories of engaged scholarship outputs to enable their wider availability, use and replication.

CHAPTER



Improving the quality of PSET provision



5.1 Introduction

South Africa, as the White Paper makes clear, has many excellent post-school institutions – together with others which offer a less than satisfactory quality of education. If the 2030 targets are to be met, every institution across the entire post-school education and training (PSET) system will need to improve the quality of its provision. It will be wasteful and negligent to permit quality to lag while access expands.

This chapter outlines strategies for improving the quality of PSET provision by improving the quality of teaching and learning, research, management and governance, staff, quality assurance and infrastructure.

Most importantly, the quality of PSET teaching and learning must be prioritised. Better learning will be supported by improving and diversifying student services, housing, foundational programmes, and modes and models of programme delivery. Better teaching will be supported by increasing the numbers, quality and qualifications of lecturers, especially but not only black academics at senior levels. At the same time, lecturers' pedagogical, curriculum development and research capacities will be improved, together with their abilities to harness digital technologies to support teaching and learning in innovative ways. The development of open learning/digital pedagogies/blended learning will be supported.

Institutional governance, leadership and management, including student leadership, will be strengthened so that, together, they can realise their own quality institutional goals while driving their sector forwards in pursuit of national objectives. These efforts will be rewarded through the provision of better infrastructure and equipment quality, utilisation, maintenance and sharing, and overseen by streamlined, more rigorous and more efficient quality assurance functions and capabilities.

5.2 Improving quality

System Goal 5: Improved quality of PSET provision

Objective: To build the capacity of PSET provider institutions to provide quality education and training

Priorities:

- to improve the quality of PSET teaching and learning;
- to improve the quality of research;
- to improve the management and governance of PSET provider institutions;
- to improve the quality of staff in the PSET system;
- to improve quality assurance capability;
- to improve the quality of infrastructure;
- to improve the health and safety of students and staff.

Outcome 5.1: Improved quality of teaching and learning in PSET provider institutions

Strategies for improving the quality of post-school teaching and learning include:

Across the PSET system

- The quality of teaching and learning will be made a central and explicit requirement of all PSET strategic planning, institutional missions and reporting mechanisms at both national and institutional levels.
- Khetha Career Development Services is already in operation to support students in making appropriate career and study choices, and the Central Applications Service (CAS) will be fully operational by 2025.
- The Department will continue to prioritise funding to address student housing needs across the PSET system, particularly but not only for first-year technical and vocational education and training (TVET) and higher education students, and will support public-private partnership models for student housing where they meet the goals of good quality and affordability.
- Improvements in the living conditions of students, both on and off campus, and adherence to norms for student housing provision and facilities will be rigorously monitored.

CET colleges

- Community education and training (CET) colleges will provide a range of appropriate academic and psychosocial student support and career advice services through dedicated college staff, partnerships with non-governmental organisations (NGOs) and non-profit organisations (NPOs), and/or local, regional or national government facilities.
- The Department of Higher Education and Training (DHET) and the Department of Basic Education (DBE) will engage on the matter of existing and potential CET college students under the age of 19, and whether they are best supported and funded in the CET college sector or through the schooling system.

The quality of teaching and learning will be made a central and explicit requirement of all PSET strategic planning, institutional missions and reporting mechanisms at both national and institutional levels.

TVET colleges

- TVET colleges will conduct a comprehensive audit of internal and external student support services to improve coordination between the two.
- The Department will develop norms for TVET student support services, including post-provisioning norms, funding norms for administrators of financial assistance, and definitions and guidelines for student support services.
- The Department will immediately provide catalytic funding for TVET student support services.
- The Department will encourage lecturers to engage in WPBL to improve the quality of lecturers in the TVET colleges.
- The Department will pilot ICT-supported distance and blended learning approaches with TVET colleges (especially those that are already offering distance programmes), develop guidelines and incentives for ICT usage, and support the universities engaged in TVET lecturers' professional development in this regard.
- TVET colleges in general, and Centres of Specialisation in particular, supported by the Department, sector education and training authorities (SETAs) and industry, will identify and, where possible, acquire or else share open educational resources (OERs) and technologies being used in the workplace.

Higher education institutions

- An enhanced and strengthened extended curriculum programme policy will be introduced with the next enrolment planning cycle, enabling more flexible support over multiple years of study.
- African languages will be promoted through the finalisation of the Higher Education Language Policy, focusing on:
 - » purposefully strengthening African language departments at universities in all indigenous languages (with at least one centre of excellence in each language) for the development of the languages themselves, for growth in research and scholarship in the languages, and for their use in particular fields of study (such as Foundation Phase teaching, health sciences, social work and other professional qualifications);
 - » developing clear language policies for all institutions, including promoting multilingualism for communication and administration purposes;
 - » developing a range of mechanisms to support teaching, learning and research in African languages, including establishing Centres for African Languages Teaching, as well as research and development chairs; and
 - » the building of capacity and provision of focused resources over a five-year period by the Department (including the University Capacity Development Grant, or UCDG), the Department of Science and Innovation (DSI), the Department of Arts and Culture (DAC) and the Pan South African Language Board (PANSALB).
- A national framework for strengthening university teaching will enable improved coordination and collaboration across institutions, greater consistency and better equity of provision, through:
 - » national, inclusive benchmarks for quality teaching;
 - » professional development for university teaching;
 - » promoting a scholarship of teaching and learning;
 - » recognising and rewarding teaching excellence; and
 - » establishing and maintaining teaching development support structures and resources.
- Professional, programme, curriculum and institutional development opportunities will include support for:
 - reviewing and renewing existing curricula to respond appropriately and responsibly to current imperatives and future trends, including 4IR imperatives related to technological and digital advancement;

- » creating new curricula in institutional priority areas (i.e. linked to institutional mandates and missions) and national development priority areas; and
- » institutional and cross-sectoral collaborative technology-enhanced teaching and learning projects, especially those aimed at replicating what is working well in some institutions.
- Postgraduate teaching and learning will be advanced through:
 - » setting and monitoring institutional targets for undergraduate/postgraduate mixes and honours, masters and PhD enrolments;
 - » support for better-quality and more effective models of doctoral study;
 - » investigating new methods of incentivising, rewarding, capacitating and professionalising postgraduate (and especially doctoral and PhD) supervision; and
 - » a joined-up postgraduate funding and success strategy between the DSI and the Department.
- An integrated, holistic approach to student success will be promoted. Student analytics, early warning systems and interventions such as tutoring, mentoring and psychosocial support services that focus on retention beyond the first year, graduation in regulation time, and improved success in gateway courses will be strengthened through the University Capacity Development Programme (UCDP) and joint efforts between the Department, universities and other partners.
- Affordable internet access for all students will be explored through both institutional and national mechanisms.

Outcome 5.2: Improved quality of research

Improving the quality of research, knowledge development and technical innovation, particularly but not only in the universities, is essential if South Africa is to meet its economic and social needs and better understand itself and its relationships with other societies. To this end:

- Both the emerging CET sector (particularly the Community Learning Centre [CLC] pilots being implemented over the period 2020–2023) and the expanding TVET sector offer numerous possibilities for comparative and developmental evidencebased research and research partnerships at both institutional and national levels to inform policy- and decision-making.
- The building of individual staff research capacity across all PSET provider institutions will be developed through partnerships with universities.
- More efficient, effective and targeted use of existing PSET research capacities and resources will be encouraged and supported.
- The full implementation of a system of national licences for key journal databases will be prioritised, and the modernisation, digitisation and sharing of library operations, as well as the development of open learning materials, will be investigated.
- Universities South Africa (USAf), the National Research Foundation (NRF), DHET, DSI and the South African National Library and Information Consortium (SANLiC) will lead convenings on Open Access 2020 (OA2020), research on current spend on journals, publication collaborations and journals in which South African scholars are publishing, as well as build relationships with OA2020 and develop a national roadmap for an open access paradigm for scholarly publications.
- Regular monitoring and quality assurance of DHET-approved journals will continue.
- The number of permanent staff with doctorates will be increased to 75%.
- The number and capacity of a black professoriate will be increased through the Future Professors Programme (FPP).

Affordable internet access for all students will be explored through both institutional and national mechanisms.

Outcome 5.3: Well-managed and -governed PSET provider institutions

In order to deepen PSET institutional self-regulation, and consolidate the gains made so far in improving management and governance (such as filling key management positions and strengthening financial management and strategic planning capacity), the following strategies will be adopted:

CET colleges

- Informed by the piloting of CET colleges and programmes, the Department will develop an appropriate, fit-for-purpose governance model (or models) for CET colleges.
- Wherever feasible, the governance systems and structures of CET colleges must allow for participation and involvement by relevant local communities and role players.

TVET colleges

- The Department will develop a capacity development framework for managers and councils in TVET colleges, and develop and start implementing support programmes for Student Representative Councils (SRCs).
- The Department will review (and, where necessary, amend) all TVET council structures and compositions.
- The Department will increase the capacity for planning long-term integrated and differentiated enrolment planning for TVET colleges by 2022.
- The Department will investigate challenges with student governance at some TVET colleges in relation to the eligibility of SRC members in terms of the CET Act.

Higher education institutions

- Reporting procedures between higher education institutions and the Department will be reviewed to ensure that new information required by this Plan (such as in relation to institutional differentiation, community engagement and Codes of Good Practice) is collected in a streamlined manner, and that the Department has the necessary monitoring and oversight capacity.
- Monitoring the transformation of the system remains an important focus. This will be a formal function of the Council on Higher Education (CHE) going forward. The CHE will develop a systemic framework for reporting and monitoring transformation indicators.
- The Department will formulate clear criteria for the appointment (or, where necessary, replacement) of members of council in public higher education institutions, along with guidelines indicating their roles and responsibilities.
- Codes of Good Practice for institutional governance will be operationalised.
- In partnership with the University Council Chairs Forum (UCCF), all members of council (including council chairs, ordinary members of council and new members of council) at all public higher education institutions will have access to targeted, fit-forpurpose training, support and induction.
- Continued support for student governance development will be provided at both institutional and national levels.
- The Higher Education Leadership and Management Programme (HELMP) will focus on developing leadership and management capacity in universities.

Continued support for student governance development will be provided at both institutional and national levels.

Outcome 5.4: Well-qualified staff in the PSET system

In order to further the professional development and capacity of lecturers and other staff in the PSET system, and attract and retain such staff:

CET colleges

- The Policy on Staffing Norms, which proposes class size norms for different programmes, will be used to determine the number of teaching staff required for each CET college.
- Universities will be supported to offer qualifications for the development of CET professional staff. Other education and training institutions will also play an important role regarding staff professional development.
- CET teacher training and development will take place for all districts and not just for the pilot sites.

TVET colleges

- The Department will be guided by the recently drafted continuing professional development framework for TVET lecturers.
- A framework for the development of TVET leadership and management staff and governance structures will also be developed.
- The Department will continuously monitor and evaluate the implementation of the frameworks.
- The Department, with the assistance of research organisations, will conduct a comprehensive study of TVET lecturer supply and demand, in the process identifying scarce and critical technical and vocational skills.
- By 2021, the Department will finalise a framework for recruiting, retaining, developing and funding TVET lecturers.
- Universities will be supported to offer qualifications for the development of TVET professional staff. Other education and training institutions will also play an important role regarding staff professional development.
- TVET colleges will train mentors and coaches annually for the induction of new lecturers.

Higher education institutions

- The Staffing South Africa's Universities Framework (SSAUF) is the main national vehicle addressing staff development imperatives at universities, especially regarding equity targets in high-need areas, as well as staff capacity development, professional development and the general rejuvenation of the academic profession.
- The UCDP, through its various SSAUF staff development sub-programmes, will address staff capacity and professional development imperatives:
 - » The Nurturing Emerging Scholars Programme (NESP) will recruit postgraduate students into academic intern positions as a first step towards an academic post.
 - » The New Generation of Academics Programme (nGAP) will recruit young people into permanent academic positions.
 - » Initiatives to increase the number of university academics that hold doctoral degrees will be implemented, such as the University Staff Doctoral Programme (USDP).
 - » The HELMP will focus on developing leadership and management capacity in universities.
 - » An FPP will be implemented to grow the pool of black and women professors.
- The equity and transformation plans of all universities will include visible strategies to improve equity amongst academic, support and management staffing cohorts at all (and especially senior) levels, which the Department will closely monitor.

Continued support for student governance development will be provided at both institutional and national levels.

Outcome 5.5: Improved quality assurance capability

Quality assurance is a vital requirement of the post-school education system, and the main areas where its capability needs strengthening are programme and qualification development processes, the TVET examination system and higher education audits and reviews.

CET colleges

- Umalusi will oversee the assessment and certification of the General Education and Training Certificate for Adults (GETCA) and the National Senior Certificate for Adults (NASCA).
- The Quality Council for Trades and Occupations (QCTO) will oversee the assessment and certification of skills/occupational programmes.

TVET colleges

- The QCTO will oversee the development of qualifications for occupations based on the ministerial approved annual Occupations in High Demand (OIHD) list, with the support of data collected by the Labour Market Intelligence Unit (LMIU) and through engagements with relevant industry associations and government departments. More specifically:
 - » In line with the recent GIZ evaluation of QCTO processes, the QCTO will appoint additional specialised staff for qualification design and development, and prioritise the development of qualifications initially across the largest occupational clusters (such as engineering and technology, business administration and services, and health and social care).
 - » This process will include the use of field experts and external facilitation, a more explicit role for stakeholders, and the consolidation of several curriculum development initiatives currently under way at colleges, private education and training institutions and through the Department.
 - » The QCTO will develop credit, curriculum and assessment specifications, particularly artisan qualifications.
- The Department, together with the QCTO, is reviewing the TVET examination system with an eye to streamlining and reducing external examinations and introducing rigorous internal examinations, to both improve efficiency and build lecturers' capacity for diagnostic and continuous assessment and remediation.
- The quality assurance functions of all quality councils concerned with the TVET sector are currently being reviewed and amended to improve efficiencies (see Outcome 1.1).

Higher education institutions

- A review of the role of the CHE will be undertaken, with an eye to strengthening its advisory function.
- The current system of programme accreditation will be reviewed to improve efficiency and effectiveness.
- A framework for a new round of audits and national reviews by the CHE was developed by the end of 2020, since these play a crucial role in triangulating information about the performance of the sector and the quality of particular fields.

Outcome 5.6: Improved quality of infrastructure

The quality of PSET infrastructure will be improved through the following strategies:

CET colleges

- The Department will build, repurpose or refurbish facilities specifically for CET colleges, in conjunction with infrastructure audits and the identification of unused or underutilised government-owned buildings.
- CET colleges, with departmental support, will be encouraged to develop partnerships with selected education and training institutions (such as schools, TVET colleges, universities and NPOs like churches) that may be able to provide additional or spare infrastructure at certain times.
- The locations of CET colleges (i.e. the primary physical structures where each college will attend to its main administration) will be decided first, with issues of accessibility in mind, even if other learning centres are being developed at the same time somewhere else.
- CET colleges will be equipped with ICT infrastructure for teaching, learning and administration through appropriate hardware and software purchases and by linking colleges to the National Research and Education Network (SANREN).
- A Community Education and Training Management Information System (CETMIS) will be developed by 2024 to capture key data, link to other public data sets like those within social services, health and schooling, and inform decision-making.

TVET colleges

- The Department will develop a framework and norms for TVET infrastructure utilisation and sharing, capital infrastructure replacement funding, and use of private provider infrastructure.
- The Centres of Specialisation being established by the Department will provide fully equipped hi-tech training spaces for specific trades, which can be shared by several TVET colleges.
- Expensive equipment such as machinery being used in industry can be shared through the Centres of Specialisation and through partnerships, which can be supported from public funding. In the TVET colleges, where the need for student support services is vast, priority interventions will be identified within each college.
- The Department, the DSI and the Department of Communications and Digital Technologies (DCDT) are on track to link all TVET colleges, through the TVET College Connectivity Project, to SANREN by 2021.
- A TVET infrastructure management information system will be fully operational by 2024.

Higher education institutions

- The Department, guided by its Macro Infrastructure Framework, will continue to provide Infrastructure and Efficiency Grants to support teaching, learning and research infrastructure at higher education institutions, focusing also on reducing maintenance backlogs.
- Institutions will be required to assess the lifespan of research equipment to permit advance planning for upgrades or replacements, where possible taking foreign exchange fluctuations into account and arranging forward cover.
- The completion of the second phase of the Rural/Remote Campus Connectivity Project will improve student and staff access to broadband connectivity and online resources.
- All institutions will develop digital transformation strategies to take full advantage of changes in technology to support teaching, learning, research, management and governance. Implementation of these strategies will be supported at public institutions though the infrastructure grants.

Education and training institutions, the Department and other government entities will promote the health and safety of all students and staff by putting in place comprehensive prevention, care and support programmes. • The Policy on Distance Education allows for the provision of distance education (including flexible and mixed mode/blended programme delivery) by all public universities, which provision must align with institution missions, enrolment planning, approved Programme Qualification Mixes (PQMs) and higher education quality council accreditation.

Outcome 5.7: Safe and healthy environment for students and staff

In order to address the worrying increase in gender-based and other forms of violence at institutions, as well as attend to the health needs of staff and students, the system will implement the following strategies:

- The Department will provide an enabling environment (through policies, guidelines, protocols, etc.) to address gender-based violence in the PSET system, guided by the policy framework.
- Education and training institutions, the Department and other government entities will promote the health and safety of all students and staff by putting in place comprehensive prevention, care and support programmes.

CHAPTER



Improving the efficiency and success of the PSET system



6.1 Introduction

The better the quality of post-school education and training (PSET) in all forms and at all levels, the greater the likelihood of systemic and institutional efficiency and success in terms of regular and sustained student progress and accomplishment and enhanced career prospects.

The quality of provision, as indicated in the White Paper and adumbrated in previous chapters of this Plan, is associated with a much more efficient and effective utilisation of existing resources and processes. It is also premised on: qualified, experienced and committed staff; informed, caring, focused and reliable student support services; and adequate and available infrastructure and data for both living and learning.

More efficient enrolment planning coupled with targeted and purposeful funding will enhance programme responsiveness and facilitate closer links with the labour market. This needs to be accompanied by better sectoral and institutional governance, leadership and management.

In addition, increased efficiency and success across all PSET sectors will promote a culture of completion, which in turn will not only improve cost-effectiveness, build work-readiness and facilitate employment, but also help to embed lifelong learning capabilities among citizens.

Accordingly, the strategies outlined in this chapter for improving the efficiency and success of the PSET system build upon and support the strategies in the preceding chapters aimed at enhancing coordination, access, responsiveness, cooperation and quality, by increasing throughput, promoting completion and improving exit outcomes.

More efficient enrolment planning coupled with targeted and purposeful funding will enhance programme responsiveness and facilitate closer links with the labour market.

6.2 Improving efficiency and success

System Goal 6: Improved efficiency and success of the PSET system

Objective: To improve qualification output and exit outcomes

Priorities:

- to increase throughput in qualifications;
- to improve exit outcomes related to the world of work.

Outcome 6.1: Increased throughput in qualifications

Improving student throughput rates is a system, sector and institutional priority.

CET colleges

- Community education and training (CET) colleges will be designed to include students from a wide variety of educational backgrounds, and will offer a range of student support services aimed at increasing persistence and improving throughput, including:
 - » assessment at entry, and differentiated placements;
 - » career guidance at entry;
 - » academic and psychosocial support;
 - » appropriate foundational or formative education programmes for students without the required prior learning for a particular programme; and
 » advice on articulating with other PSET provider institutions.
- The Department will utilise cohort analysis to provide a more accurate picture of throughput in the CET sector and inform decision-making and possible interventions.
- Data will be collected on CET skills programmes in the same way as for qualification programmes, so that an evidence base of enrolment, retention and completion trends can be developed to inform future planning.

TVET colleges

- The Department will require all technical and vocational education and training (TVET) colleges to prioritise and report on provision of student support services, with emphasis on promoting student throughput and success.
- The Department will improve reporting on skills development and successful completion (particularly in minimum time) of TVET skills programmes, and utilise cohort analysis to improve efficiencies and inform decision-making.
- The Department will utilise cohort analysis to provide a more accurate picture of throughput, dropout and retention across all programmes in the TVET sector and thereby inform decision-making and possible interventions.

Higher education institutions

- Sectoral-level performance indicators for student throughput, completion and success, including student, staff and curriculum development and trends in high dropout areas, will be monitored annually through cohort studies conducted using Higher Education Management Information System (HEMIS) data.
- The Department will continue to utilise cohort analysis to provide a more accurate picture of completion (including time to graduate) in the higher education sector and inform decision-making and possible interventions.
- The University Capacity Development Programme (UCDP) will support the establishment of a comprehensive, integrated approach to the development of student analytics capacity, early warning systems, student advising systems and a range of student support services that address academic, psychosocial and life/logistic needs.

Outcome 6.2: Improved exit outcomes related to the world of work

An important indicator of efficiency and success is improved employment opportunities, on which more data and research are required.

CET colleges

- Career advice and employment services will be made available to CET students through the national career portal, the National Youth Development Agency offices and the Department of Labour (DoL).
- CET colleges will link up with entrepreneurship hubs and employment creation initiatives to facilitate student access to the world of work.
- CET colleges will support students to write curricula vitae, apply for jobs and prepare for job interviews.
- The national tracer system, once fully operational, will provide meaningful data on CET student destinations, which will be used to improve future college functioning.

TVET colleges

• The Department will support TVET colleges to gather and submit essential data on student destinations, to the national management information system, so as to permit systematic tracer studies.

Higher education institutions

• The Department will assist higher education institutions to gather essential data on graduate destinations, which can be used to inform systematic tracer studies.

The Department will continue to utilise cohort analysis to provide a more accurate picture of completion.

CHAPTER

Resourcing and financing the PSET system



7.1 Introduction

The implementation of this Plan will require both increased funding and much better use of available funding. Considering the 2030 goals and targets of the White Paper, all post-school education and training (PSET) sectors are chronically underfunded, and funding will need to significantly be reprioritised and improved if increased access is to be accompanied by enhanced success, especially given the threats to the fiscus because of COVID-19.

The cost drivers for implementing the Plan and achieving the policy goals, among others, are:

- establishing community colleges;
- piloting community colleges;
- expanding enrolment;
- providing distance/blended/online education;
- rolling out fee-free education;
- providing extra beds;
- student success initiatives;
- student support services;
- strengthening the qualifications of lecturers;
- Programme Qualification Mix (PQM), particularly in technical and vocational education and training (TVET) where more occupational programmes are envisaged.

The Department will consider the costing work that was conducted by the National Treasury with the Department, and develop a strategy, together with government, for multiple modalities of funding the system, including partnerships with the private sector and developing an ecosystem of funding for the PSET system.

Considering the 2030 goals and targets of the White Paper, all PSET sectors are chronically underfunded, and funding will need to significantly improve if increased access is to be accompanied by enhanced success.

7.2 Key strategies for funding and resourcing the PSET system

A range of strategies is necessary to mobilise sustainable funding to achieve PSET system goals. The strategies below are premised on the continuation of the current approach to the funding of provider institutions, which is a cost-sharing model based on a combination of fiscal funding, student fees and other sources of income for institutions.

Financial support for students

- The new Department of Higher Education and Training (DHET) full-cost Bursary Scheme (effected through a partnership with the National Student Financial Aid Scheme, or NSFAS, and PSET institutions, and covering full tuition costs and 'standardised' amounts for tuition materials, accommodation, food and travel where eligible) is being phased in over five years for university students from poor and working-class families, having started with the 2018 first-time entering students.
- The Bursary Scheme also covers all TVET college students in all years of study since 2018.
- The Department will review all current PSET funding frameworks and develop appropriate ones for each PSET sector based on enrolment and outputs, with reference to the need for joined-up funding between fiscal and skills development levy (SDL) funding in general, and particularly in areas such as the development of workplace-based and work-integrated learning platforms.
- It is envisaged that community education and training (CET) colleges will be largely fee-free for poor and working-class students, although employers will pay to access programmes for their employees, and training of beneficiaries of government programmes (like the Expanded Public Works Programme, or EPWP) will be based on a cost recovery model.
- Public–private partnership models will be utilised in order to support university and TVET students who do not qualify for the NSFAS.
- The DHET will explore the modalities of a joined-up strategy with the Department of Science and Innovation (DSI) regarding improving postgraduate funding and success.
- The Department, working with the NSFAS, will continue to review and evaluate the effectiveness of the scheme in the light of contextual matters that may affect its sustainability in the medium to long term.

Provision of adequate fiscus funding to education and training institutions and supporting institutions

- The Department will work with Universities South Africa (USAf) to gather more and better-quality data and information about the real costs of providing higher education, and the impact of COVID-19 on current funding sources, to assist funding planning.
- The Department will work with National Treasury to establish a long-term plan to ensure that the state subsidy for higher education (and the block grant in particular) keeps pace with higher education inflation, and to protect the education budget in the wake of COVID-19.
- The Department, considering the advice of the Council on Higher Education (CHE) and in consultation with Treasury and public higher education institutions, will develop a national approach to tuition fee-setting, focused on narrowing the range of differences in fees across institutions, and backed by effective government support.
- For the expansion of infrastructure, specifically student housing, the Department will
 facilitate engagements with relevant government departments and financiers to
 consider opportunities to expand the provision of student housing more rigorously.
- Stronger partnerships will be established with the private sector, foundations, philanthropies and other donors to ensure alignment of efforts towards achieving National Plan for Post-School Education and Training (NPPSET) goals.

 A study will be undertaken to evaluate how fiscal and SDL funds are currently, and in future could be better, distributed to the South African Qualifications Authority (SAQA), the Quality Council for Trades and Occupations (QCTO), CHE and the Council for Quality Assurance in General and Further Education and Training (Umalusi). It will also take into account the planned streamlining of institutional quality assurance roles and responsibilities currently under way (see Outcome 1.1) and the funding needs of other supporting institutions (such as the Human Resource Development Council [HRDC]).

Funding the national system of innovation

• The DSI will mobilise public and private spending to increase the funding available for the national system of innovation, premised on a quadruple-helix model which brings government, universities, industry and civil society together.

Prudent management of available financial resources

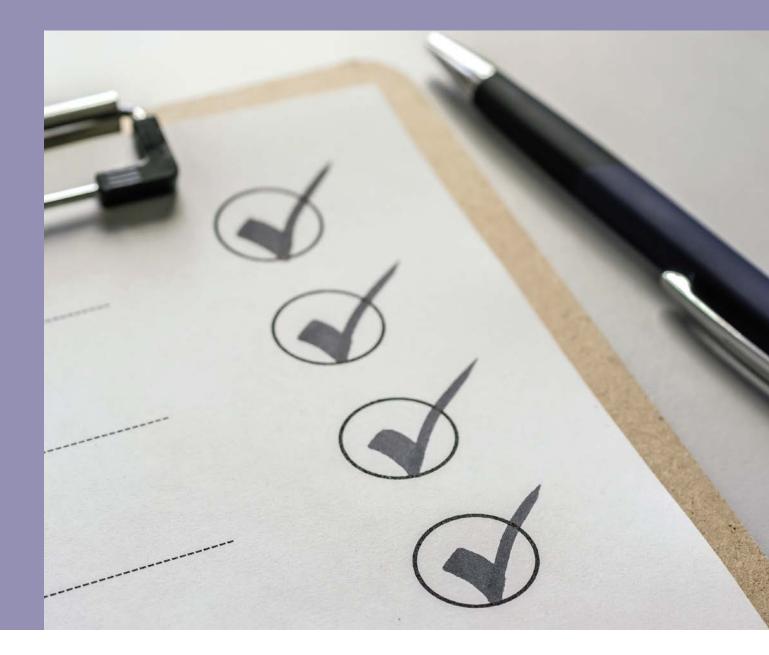
- The Department will closely and regularly monitor the implementation of all aspects of this Plan to ensure and improve on efficiencies and economies of scale at all levels across the PSET system, and to maximise the reach and impact of all available resources, in part but not only through its:
 - » ongoing and planned reviews of institutional roles, responsibilities, mandates and missions;
 - » funding frameworks;
 - » infrastructure and enrolment planning;
 - » diverse modes to delivery;
 - » quality assurance mechanisms;
 - » qualification development and articulation;
 - » data and administrative systems;
 - » partnerships; and
 - » sharing of facilities and resources.

Capacity of the DHET

• The Department has consistently reviewed its capacity and funding since the publication of the White Paper and will continue to do so to ensure effective implementation of the Plan and the achievement of outcomes set out therein.

CHAPTER

Implementation strategy



The high-level implementation strategy presented in Table 8 addresses the key areas for implementation, beginning with the transition from current plans to the National Plan for Post-School Education and Training (NPPSET). The Department and other post-school education and training (PSET) institutions and entities will draw on the NPPSET to develop detailed sector and operational plans for implementing the Plan, in line with existing planning processes.

Implementation focus area	Actions	Responsibility
	Short-term immediate priorities: 2020/21–2021/22	
Transition from current plans to	• Develop a communication strategy to introduce the Plan and explain the key strategies and their operationalisation	• DHET
NPPSET	 Stakeholder engagement on Plan implementation – orientation of staff and external stakeholders by various constituencies 	DHET, SAQA, USAf, HRDC
	 Form a transversal management structure for implementing and monitoring the Plan 	• DHET
	 Commence legislative review and policy alignment Strategic and operational planning in line with the Plan 	 DHET, SAQA, DEL, DTI DHET, SAQA, DSI, DTI, DEL
	Develop Plan implementation risk and mitigation strategies	DHET
Institutional configuration and restructuring	 Organisational development review of the DHET's capacity to implement the Plan Establish the LMIU and investigate the feasibility of 	 DHET with the assistance of the Department of Public Service and Administration (DPSA) DHET
	 establishing SAIVCET Consider merger process for institutions and structures Establish the infrastructure development support unit 	DHET DHET
Establish bilateral relations	 DBE, DHET and quality councils engage on streamlining provision of vocational and technical programmes Formalise collaboration between DHET and DSI, DEFF, (DALRRD), DoH, DTI, etc. 	 DHET, DBE and quality councils DHET and relevant departments
Funding	 Negotiate funding for implementing the Plan with government and the private sector Specific dedication on raising funding for community college pilots WPBL processes to enable joined-up funding 	 DHET, National Treasury DHET DHET and NSF
Research and evaluation	 Develop prospective designs for impact evaluation of several elements of implementation of the Plan Conduct baseline research Finalise the DHET M&E framework in line with the Plan 	 Research organisations with DHET Research organisations DHET

TABLE 8: NPPSET implementation phases, focus areas and responsibility

Implementation focus area	Actions	Responsibility	
	Medium-term priorities: 2022/23–2024/25		
Planning	 Finalise various frameworks to enable implementation, for example frameworks on capacity development of staff, funding norms, fully subsidised education, fee regulation, student support services, macro-infrastructure planning, infrastructure utilisation, differentiation and internationalisation Mainstream disability in policies and practices Finalise any policy and legislative changes to the NQF Act, CET Act, Labour Relations Act, Basic Conditions of Employment Act, etc. 	 DHET DHET DHET, SAQA, DST, DSI, DEL 	
Implementation	 Increase enrolment Develop responsive qualifications Build capacity of lecturers, leadership, quality councils, management and support staff Audit national infrastructure Improve quality of teaching and learning Facilitate WPBL Improve quality of infrastructure Strengthen and integrate data management systems Provide sustainable funding Support implementation by engaging stakeholders to address obstacles to effective skills development 	 DHET, PSET institutions DHET, LMIU, PSET institutions, SAQA, CHE, Umalusi, QCTO, professional councils DHET, universities, NGOs, employers DHET PSET institutions SETAs, employers, education and training institutions, DTI, DEL DHET, DSI, USAf DHET, SETAs DHET, private sector HRDC 	
Monitoring	 Institutionalise the DHET's M&E Framework Practise adaptive management in implementing the Plan, based on intelligence from annual performance planning, to improve outcomes Adjust targets based on feedback from monitoring data Collect data for mid-term review of Plan implementation Collect mid-line data for impact evaluations 	 DHET All PSET institutions Research organisations 	
Evaluation	 External evaluations of first half of Plan implementation Evaluation of the performance of the system Develop repository for evaluations that is linked to the research repository 	 DHET, HRDC Research organisations DHET 	
	Long-term priorities: 2026–2030		
Implementation	 Update strategic plans to revise targets Continuous improvement in infrastructure, capacity, responsiveness and quality in all key areas as highlighted in the Plan Support implementation by unblocking blockages 	All PSET institutionsAll PSET institutionsHRDC	
Monitoring	 Collect end-line data for impact evaluations Adaptive management based on monitoring data 	Research organisationsAll PSET institutions	
Evaluation	Produce reports for impact evaluationsEngage with impact evaluation reports	Research organisationsAll PSET institutions	

APPENDIX: CONSOLIDATED NPPSET STRATEGIES

The following tables outline the consolidated outcomes-based strategies for the sectors of provision, the qualifications authority and quality assurance councils and skills levy institutions. The tables do not capture all strategies in the Plan, especially cross-cutting system strategies, but are meant to be a quick reference for sector strategies. As such, it is not adequate for implementers to read just these consolidated strategies for an understanding of the Plan.

CET sector strategies

Outcomes	Strategies
1.2 Improved capability for integration, coordination and articulation in the PSET system	 The Department will implement, monitor, evaluate and develop 21 CET colleges and 52 CLC pilot programmes. The Department will pilot CLC programme offerings aligned to national social and economic development programmes (like the EPWP, the CDW, smallholder farmer development programmes and cooperatives development), as well as specific locally responsive programmes (such as those addressing drug abuse or supporting fishing communities). Various technology-enabled teaching and learning methods will also be trialled. The pilot programmes will also assist the Department and the QCTO to explore diverse opportunities for the delivery of CET skills and occupational programmes, based on qualifications already established. The Department has earmarked for piloting five CLCs at each of eight current CET colleges (or 40 CLCs altogether), which means that, together with existing pilots at 12 CLCs in Gauteng, a total of 52 CLCs are to be piloted. These pilots will run for five years. Over each of the four MTEF periods from 2019 through to 2030, the Department will establish or declare three fully fledged CET colleges. These 12 colleges, together with the existing nine, will result in the 21 colleges envisaged for 2030. A life-cycle approach to infrastructure development and maintenance will be adopted in the construction of these colleges. Funding and partnerships to initialise, operationalise and sustain the pilots will be provided by the Department itself, other government departments, the SETAs and the NSF. CET teaching staff who will teach in the pilots will be linked to other PSET MIS and the collection, curation and analysis of data from and by all PSET provider institutions will be streamlined and simplified, and processes put in place to ensure reliability, accuracy and quality. All PSET provider institutions will be required to collect basefund and capacitate tracer studies of students both within and outside the
1.4 Increased articulation for students between and within the NQF sub-frameworks, and between and within institutions	 The Department, in collaboration with other institutions, will develop multipronged funding strategies for the inclusion of people with disabilities in the PSET system, including revised NSFAS funding procedures for students with disabilities at CET colleges.

Outcomes	Strategies
1.5 Aligned policy and legislation	 Provision of foundational learning in CET will need to be reflected in funding norms and frameworks.
2.1 Increased enrolment in all PSET sectors	 CET colleges will be marketed as the PSET provider institutions of choice. CET college enrolment planning and PQM development will be shaped by the findings of the pilot process, the 2030 enrolment targets and the Department's 10-year cumulative annual growth projections. Skills programme-related partnerships between CET and TVET colleges will be encouraged. A capacity development programme like the UCDP will be developed.
2.3 Affordable student fees and accommodation	 As from 2019, poor and working-class students have been receiving fee-free tuition.
2.5 Strengthened institutional differentiation	 CET colleges will be differentiated according to their size, geographical spread and programme offerings and modes of delivery. This will be informed by the findings of the CLC pilot process, also taking account of size, geographic spread and programme offerings.
2.6 Adequate infrastructure to support teaching, learning and research	 The provision of new CET campuses, where necessitated by increasing enrolments and programmes, will be complemented by identifying and repurposing unused or underutilised government-owned buildings. The SANREN access project for TVET colleges (TVET College Connectivity Project) and rural university campuses will be extended to CET colleges as they are developed.
2.7 Sufficient staff to support expansion	 Appropriate CET staff numbers will be informed by the findings of the CLC pilot programmes together with the Policy on Staffing Norms.
3.1 A diverse range of programmes relevant to locality and responsive to community needs	 CET colleges will offer skills/occupational programmes, community education programmes, general or academic programmes (particularly the GETCA and NASCA) and foundational learning programmes. In the long term, and considering demand, capacity and resources, CET colleges should also position themselves to offer programmes at other levels of the NationalQualifications Framework, or (such as Higher Certificates). CET colleges will work with community development workers to collect information from communities about their education and training needs and the level of demand. CET colleges will conduct audits of local skills programmes and community programmes to determine possibilities for programme development and partnerships.
3.2 A diverse range of programmes responsive to the world of work	 CET colleges will analyse municipal LED plans and LMIU data to assess demand and develop programmes, including programmes which articulate with TVET studies, and skills development programmes where needed by other government departments. Some Level 2 and 3 qualifications quality-assured by the Quality Council for Trades and Occupations (QCTO) will also be offered in CET colleges if they have the capacity, in order to provide articulation possibilities both to entry-level employment and to further education in TVET colleges.

Outcomes	Strategies
3.2 _{/cont.}	 Depending on the findings of the pilots, opportunities may exist for CET colleges to collaborate with other government departments for mutual benefit, by providing skills development programmes aligned to national social and economic development programmes like the Expanded Public Works Programme (EPWP), the Community Development Works (CDW), smallholder development, fisheries and cooperatives (see Outcome 1.2). CET colleges will ensure that their programmes, curricula and teaching and learning approaches are geared to opportunities of technological and digital advancement (4IR) so that graduates are exposed to and can contribute to implementing and further developing emerging 4IR technologies such as automation, digitisation, robotics, artificial intelligence, machine learning, and the internet of things.
5.1 Improved quality of teaching and learning in PSET provider institutions	 CET colleges will provide a range of appropriate academic and psychosocial student support and career information, advice and guidances services through dedicated college staff, partnerships with NGOs and NPOs, and/or local, regional or national government facilities such as Khetha. The Department and the DBE will engage on the matter of existing and potential CET college students under the age of 19, and whether they are best supported and funded in the CET college sector or through the schooling system. The quality of teaching and learning will be made a central and explicit requirement of all PSET strategic planning, institutional missions and reporting mechanisms at both national and institutional levels.
5.2 Improved quality of research	 Both the emerging CET sector (particularly the Community Learning Centre [CLC] pilots being implemented over the period 2020–2023) and the expanding TVET sector offer numerous possibilities for comparative and developmental evidence-based research and research partnerships at both institutional and national levels, to inform policy- and decision-making. The building of individual staff research capacity across all PSET provider institutions will be developed through partnerships with universities. More efficient, effective and targeted use of existing PSET research capacities and resources will be encouraged and supported
5.3 Well-managed and -governed PSET provider institutions	 An appropriate, fit-for-purpose governance model (or models) for CET colleges which, where feasible, allows for community participation, will be developed. Wherever feasible, the governance systems and structures of CET colleges must allow for participation and involvement by relevant local communities and role players.
5.4 Well-qualified staff in the PSET system	 The Policy on Staffing Norms will determine the number of teaching staff required for each CET college. Universities will be supported to offer qualification programmes for CET college lecturers and professional development will be enabled. CET teacher training and development will take place for all districts and not just for the pilot sites.
5.5 Improved quality assurance capability	Umalusi will oversee the assessment and certification of the GETCA and NASCA, and QCTO the assessment and certification of skills/occupational programmes.

Outcomes	Strategies
5.6 Improved quality of infrastructure	 The Department will build, repurpose or refurbish facilities specifically for CET colleges, in conjunction with infrastructure audits and the identification of unused or underutilised government-owned buildings. CET colleges, with departmental support, will be encouraged to develop partnerships with selected providers (such as schools, TVET colleges, universities and NPOs like churches) that may be able to provide additional or spare infrastructure at certain times. The locations of CET colleges (i.e. the primary physical structures where each college will attend to its main administration) will be decided first, with issues of accessibility in mind, even if other learning centres are being developed at the same time somewhere else. CET colleges will be equipped with ICT infrastructure for teaching, learning and administration through appropriate hardware and software purchases and by linking colleges to SANREN. A CETMIS will be developed by 2024, to capture key data, link to other public data sets like those within social services, health and schooling, and inform decision-making.
5.7 Safe and healthy environment for students and staff	 Appropriate interventions will be implemented to promote the health and safety of students and staff. All PSET institutions will implement the policy framework on gender-based violence.
6.1 Increased throughput in qualifications	 CET colleges will be designed to include students from a wide variety of educational backgrounds, and will offer a range of student support services aimed at increasing persistence and improving throughput, including: » assessment at entry, and differentiated placements; » career information, advice and guidance at entry; » academic and psychosocial support; » appropriate foundational or formative education programmes for students without the required prior learning for a particular programme; and » advice on articulating with other PSET provider institutions. The Department will utilise cohort analysis to provide a more accurate picture of throughput in the CET sector and inform decision-making and possible interventions. Data will be collected on CET skills programmes in the same way as for qualification programmes, so that an evidence base of enrolment, retention and completion trends can be developed to inform future planning.
6.2 Improved exit outcomes related to the world of work	 Career information, advice, guidance and employment services will be made available to CET students through the national Career Advice portal, the National Youth Development Agency offices and the DEL. CET colleges will link up with entrepreneurship hubs and employment creation initiatives to facilitate student access to the world of work. CET colleges will support students to write curricula vitae, apply for jobs and prepare for job interviews. The national tracer system, once fully operational, will provide meaningful data on CET graduate destinations, which will be used to improve future college functioning.

TVET college strategies

Outcomes	Strategies
1.2 Improved capability for integration, coordination and articulation in the PSET system	 All PSET provider institutions will be required to document registration and qualification outputs using unit record data with ID or passport numbers, to facilitate tracer studies of students both within and outside the PSET system. All PSET provider institutions will be required to collect baseline data prior to implementing interventions in the Plan, to better measure outcomes and impact.
1.5 Aligned policy and legislation	 Provision of foundational learning in TVET colleges will need to be reflected in funding norms and frameworks. Enrolment planning for TVET colleges will require enrolment planning policy changes. Expansion of provision of qualifications at NQF Levels 5 and 6 in TVET colleges will require amending the Continuing Education and Training Act.
2.1 Increased enrolment in all PSET sectors	 TVET colleges will be marketed as the PSET provider institutions of choice. Distance, online and open learning in the TVET sector will grow gradually. Skills programme-related partnerships between CET and TVET colleges will be encouraged. The Department will develop a TVET enrolment planning and PQM development policy and guidelines, based on an analysis of all TVET college PQMs as well as factors such as physical infrastructure, staff capacity, locality, surrounding industry and possibilities for WPBL. A capacity development programme, along the lines of that implemented in universities though the UCDP, will be developed and implemented in TVET colleges. Skills programme-related partnerships between CET and TVET colleges will be encouraged.
2.2 Improved and equitable participation rates	 Improved participation rates, particularly for African and Coloured students and students with disabilities, will be determined and supported through enrolment planning and other mechanisms.
2.3 Affordable student fees and accommodation	• As from 2019, poor and working-class students in TVET colleges have been receiving fee-free tuition.
2.4 A sustainable student financial aid system	 Free, full cost of tuition and education is being phased in over five years for TVET college students from poor and working-class backgrounds. The Department, in collaboration with other institutions, will develop multipronged funding strategies for the inclusion of people with disabilities in the PSET system, including revised NSFAS funding procedures for students with disabilities at TVET colleges.
2.5 Strengthened institutional differentiation	 TVET colleges will be differentiated in the extent to which they respond appropriately to widely divergent community, local, regional and national developmental needs: Based on their proximity to particular industries, selected TVET campuses will be developed to become Centres of Specialisation which offer trade and occupational qualifications specific to their localities and/or which are required for the implementation of the National Infrastructure Plan and the NDP. In other instances, such as in contexts where colleges are sparsely spread, or transport and accommodation are limited, TVET colleges or campuses will need to be multi-programmatic. More generally, innovation should drive differentiation: where capacity exists, TVET colleges will be empowered to supply niche skills and offer programmes on demand even if not part of their pre-approved PQMs.

Outcomes	Strategies
2.6 Adequate infrastructure to support teaching, learning and research	 The development of e-learning, workshop and work simulation infrastructure and equipment for TVET colleges will be linked to overall PSET enrolment planning and PQM processes. The SANREN access project for TVET colleges/the TVET College Connectivity Project and rural university campuses will be completed by 2021. Continuous improvement of infrastructure to support teaching and learning, especially given the growth in blended and hybrid forms of learning, must be considered, in line with available funds. A life-cycle approach to infrastructure development and maintenance will be adopted in the construction of these colleges. Better TVET college timetabling will ensure more efficient utilisation of available spaces from morning to evening and during weekends. Where possible, the Department will incentivise private providers that can make infrastructure (e.g. training spaces) available to TVET colleges.
2.7 Sufficient staff to support expansion	 Appropriate TVET staff numbers will be determined at sector level as part of operational planning.
3.1 A diverse range of qualifications relevant to the locality and responsive to community needs	 TVET colleges will offer general vocational programmes (particularly the NCV, pending its review), including specific skills/occupational programmes, higher certificate programmes (currently in partnership with universities) and foundational learning programmes. Over the longer term, as TVET colleges develop the capacity, they should also offer Advanced Certificates (NQF Level 6) and Diplomas (NQF Level 6). The Department will develop the capacity of TVET college academic boards to provide oversight on enrolment planning and PQM development. From 2020, the Department will commence with the review and approval of each TVET college's proposed PQM. A joined-up funding strategy, which will consolidate programme funding processes from government, industry, the SETAs and the NSF, will be developed to ensure that all required TVET programmes are effectively funded.
3.2 A diverse range of programmes responsive to the world of work	 Umalusi, the QCTO and SAQA will review all NQF Level 2 and 3 occupational Certificates and NQF Level 4 NOCs with regard to the possibility of simulated workplace experience components. This would require an amendment to the SDA definition of occupational programmes. The Department will investigate the need to develop new Higher and Advanced Occupational Certificates to cater for Grade 12/NSC learners and others who meet their admission requirements and, if feasible, to adapt current legal frameworks to allow such certificates to be offered independently at TVET colleges (where capacity exists or has been developed). The Department has designed and will pilot foundational programmes (in the form of a flexible set of non-stand-alone modules) intended to enable TVET students to access the full range of TVET programmes, and which, apart from language, science and mathematical skills, should include life skills such as time management, IT and communication skills, and work-readiness. The Department is introducing Centres of Specialisation in selected TVET colleges, each initially focused on one or more of 13 priority trades, and thereby responding to the demand for skills to implement the National Infrastructure Plan and the NDP, as well as for skills in general. The skills offered will eventually expand beyond the initial 13. The Department is also working on several other partnership initiatives to ensure quality provision that is integrated with the workplace. These will continue to be 'tested' and, where they are able to contribute to the growth and quality of the system, will be expanded. This includes partnership efforts such as those with the manufacturing industry, installation repair and maintenance, dual apprenticeship programmes, etc.

Outcomes	Strategies
3.2/cont.	 The Department will assist TVET colleges to develop tracking systems to follow students throughout their studies (to enable effective student support) and, after completion, into the world of work (to monitor graduate destinations). Occupational programmes will be responsive to global technological advancements.
3.3 A diverse range of mechanisms to improve research, innovation, commercialisation and entrepreneurship in higher education	• The NSF will be encouraged to fund and support research and innovation which cuts across PSET sectors, such as public–private partnerships between TVET colleges, universities of technology, private providers and industry in areas such as engineering, IT, agriculture, minerals and materials beneficiation and other forms of applied research.
3.4 Programmes that prepare students for global advances in technology	 Gear the curriculum for the 4IR. Establish partnerships to develop a clear understanding of the impact of 4IR to prepare for this collectively and strategically.
4.2 Improved links between education and training institutions and employers for WPBL	 Programme design processes will be restructured and streamlined to be more efficient and relevant and less time-consuming for all concerned, including employers, professional bodies which develop qualifications and curricula, and students. Accordingly: Employers and professional bodies need to be involved in decision-making about WPBL processes, and, where necessary, supported to ensure that WPBL is optimally managed and delivered. The duration of WPBL must allow for authentic learning to take place and for employers' and students' interests to be addressed. WPBL requirements may differ between programmes and can range from real workplace experience (e.g. essential for civil engineering, teaching, health and some hospitality programmes) to simulated work experience laboratories, virtual reality experiences, augmented reality and technical workshop experiences. A systemic planning and advocacy strategy will be developed by the Department, supported by the QCTO and the higher education quality council, to improve and increase WPBL opportunities and partnerships across the system. Institutional capacity will be improved by dedicating adequate numbers of qualified staff to WPBL support and partnership functions, and by integrating WPBL continuing professional development into the performance requirements of all lecturers teaching technical, vocational and professional qualifications. Employers will be better supported in WPBL through offering high-quality training for workplace supervisors and mentors, to ensure the best possible workplace learning experiences for students. Quality assurance arrangements will be clarified to accommodate different types of WPBL, focusing on assessment where WPBL is linked to a qualification, or focusing on work-readiness where WPBL involves internships (which should also link to professional qualifications. Moreover, in conju

Outcomes	Strategies
4.2/cont.	 WPBL-related policies and legislation (such as what the Labour Relations Act and the Compensation for Occupational Diseases and Injuries Act say about the status of students in the workplace) will be brought into alignment through an interministerial committee with the DoL, coupled with inputs from NEDLAC. More generally, via the SETA shared services system, processes for registering, administering and reporting on WPBL will be simplified and streamlined and terminology on learnerships, e.g. 'candidacy' and 'internship', will be clarified.
5.1 Improved quality of teaching and learning in PSET provider institutions	 TVET colleges will conduct a comprehensive audit of internal and external student support services to improve coordination between the two. The Department will develop norms for TVET student support services, including post-provisioning norms, funding norms for administrators of financial assistance, and definitions and guidelines for student support services. The Department will immediately provide catalytic funding for TVET student support services. The Department will encourage lecturers to engage in WPBL so as to improve the quality of lecturers in the TVET colleges. The Department will pilot ICT-supported distance and blended learning approaches with TVET colleges that are already offering distance programmes, develop guidelines and incentives for ICT usage, and support the universities engaged in TVET lecturers' professional development in this regard. TVET colleges in general, and Centres of Specialisation in particular, supported by the Department, SETAs and industry, will identify and, where possible, acquire or else share technologies being used in the workplace. The Department will continue to prioritise funding to address student housing needs across the PSET system, particularly but not only for first-year technical and vocational education and training (TVET) and higher education students, and will support public–private partnership models for student housing where they meet the goals of good quality and affordability. Both the emerging CET sector (particularly the Community Learning Centre [CLC]) pilots being implemented over the period 2020–2023) and the expanding TVET sector offer numerous possibilities for comparative and developmental evidence-based research and research capacity across all PSET provider institutional and national levels, to inform policy- and decision-making. The building of individual staff research capacity across all PSET research capacities and resources will be encouraged and supported.
5.2 Improved quality of research	 Both the emerging CET sector (particularly the Community Learning Centre [CLC] pilots being implemented over the period 2020–2023) and the expanding TVET sector offer numerous possibilities for comparative and developmental evidencebased research and research partnerships at both institutional and national levels, to inform policy- and decision-making. The building of individual staff research capacity across all PSET provider institutions will be developed through partnerships with universities. More efficient, effective and targeted use of existing PSET research capacities and resources will be encouraged and supported.

Outcomes	Strategies
5.3 Well-managed and -governed PSET provider institutions	 The Department will develop a capacity development framework for managers and councils in TVET colleges, and develop and start implementing support programmes for SRCs. The Department will review (and, where necessary, amend) all TVET council structures and compositions. The Department will increase its capacity to analyse TVET college enrolment plans, in preparation for the pending review thereof (in 2021). The Department will investigate challenges with student governance at some TVET colleges in relation to the eligibility of SRC members in terms of the CET Act.
5.4 Well-qualified staff in the PSET system	 The Department will be guided by the recently drafted continuing professional development framework for TVET lecturers. A framework for the development of TVET leadership and management staff and governance structures will also be developed. The Department will continuously monitor and evaluate the implementation of the frameworks. The Department, with the assistance of research organisations, will conduct a comprehensive study of TVET lecturer supply and demand, in the process identifying scarce and critical technical and vocational skills. By 2021, the Department will finalise a plan for recruiting, retaining, developing and funding TVET lecturers. Universities will be supported to offer qualifications for the development of TVET professional staff. Other education and training institutions will also play an important role regarding staff professional development. TVET colleges will train mentors and coaches annually for the induction of new lecturers.
5.5 Improved quality assurance capability	 The QCTO will oversee the development of qualifications for occupations based on the ministerially approved annual OIHD list, with the support of data collected by the LMIU and through engagements with relevant industry associations and government departments. More specifically: In line with the recent GIZ evaluation of QCTO processes, the QCTO will appoint additional specialised staff for qualification design and development and prioritise the development of qualifications initially across the largest occupational clusters (such as engineering and technology, business administration and services, and health and social care). This process will include the use of field experts and external facilitation, a more explicit role for stakeholders, and the consolidation of several curriculum development initiatives currently under way at colleges, private education and training institutions and through the Department. The QCTO will be assisted by the Department and by the NAMB, considering curriculum and assessment specifications, particularly artisan qualifications. The Department, together with the QCTO, is reviewing the TVET examination system, with an eye to streamlining and reducing external examinations and introducing rigorous internal examinations to both improve efficiency and build lecturers' capacity for diagnostic and continuous assessment and remediation. The quality assurance functions of all quality councils concerned with the TVET sector are currently being reviewed and amended to improve efficiencies.

Outcomes	Strategies
5.6 Improved quality of infrastructure	 The Department will develop a framework and norms for TVET infrastructure utilisation and sharing, capital infrastructure replacement funding, and use of private provider infrastructure. The Centres of Specialisation being established by the Department will provide fully equipped hi-tech training spaces for specific trades, which can be shared by a number of TVET colleges. The Department, the DSI and the DoC are on track to link all TVET colleges to SANREN by 2020. A TVET infrastructure management information system will be fully operational by 2024. Expensive equipment such as machinery being used in industry can be shared through the Centres of Specialisation and through partnerships, which can be supported from public funding. In the TVET colleges, where the need for student support services is vast, priority interventions will be identified within each college.
5.7 Safe and healthy environment for students and staff	 Appropriate interventions will be implemented to promote the health and safety of students and staff. The Department will provide an enabling environment (through policies, guidelines, protocols, etc.) to address gender-based violence in the PSET system guided by the policy framework.
6.1 Increased throughput in qualifications	 The Department will require that all TVET colleges prioritise and report on provision of student support services, with emphasis on promoting student throughput and success. The Department will improve reporting on skills development and successful completion (particularly in minimum time) of TVET skills programmes and utilise cohort analysis to improve efficiencies and inform decision-making. The Department will utilise cohort analysis to provide a more accurate picture of throughput, dropout and retention across all programmes in the TVET sector and thereby inform decision-making and possible interventions.
6.2 Improved exit outcomes to the world of work	• The Department will support TVET colleges to gather and submit essential data on graduate destinations to the national management information system so as to permit systematic tracer studies.

Higher education strategies

Outcomes	Strategies
1.2 Improved capability for integration, coordination and articulation in the PSET system	 The Department's SHIP plans to develop 300 000 new beds by 2026, in part by encouraging PSET provider institutions to build 1 000-bed student villages rather than 100-bed student residences, with funding provided through rentals by students, Infrastructure and Efficiency Grants, institutions' own resources, international and local development finance, IIPSA and the private sector. The SHIP project management office will work with the IDSP, which will monitor the delivery of the SHIP. The planning for institutionally owned student housing must be integrated into the macro spatial development plans of each institution. A life-cycle approach to infrastructure development and maintenance will be adopted in the construction of these colleges. The DHET will facilitate the implementation of at least three education precincts in areas where at least one CET college, one technical and vocational education and training (TVET) campus and one university campus are in close proximity to one another, in collaboration with other government spheres and departments, such as Education and Health. All learning materials developed using public funds will be made available as OERs, and the Department will support interventions in the design and development of high-quality learning resources that will be shared as open resources. The Department will acquire electronic resources, including open-source software and shared software licences, for the entire PSET system, in collaboration with SANLiC, the South African Technology Network and other consortia. All PSET provider institutions will be required to document registration and qualification outputs using unit record data with ID or passport numbers, to facilitate tracer studies of students both within and outside the PSET system. All PSET provider institutions will be required to collect baseline data prior to implementing interventions in the Plan, to better measure outcomes and impact.
1.5 Aligned policy and legislation	• Where elements of the NPPSET have legal implications, these will be addressed through reviews of and appropriate changes to relevant policies and legislation.
2.1 Increased enrolment in all PSET sectors	 The Department will review the enrolment planning system currently operating in the higher education sector in order for it and sector institutions to identify, learn from and improve on what works. Distance and open learning (including blended learning) in the higher education sector will be permitted to grow gradually, in line with demonstrable improvements in quality, success rates and institutional capacity. The CAS, enabling students to apply for different areas of study and at a range of institutions, will be fully operational by 2025. Equity, redress and diversity in student demographics will be ensured through ongoing enrolment planning and other interventions (such as placement assessments, student support services and foundational programmes), with the support of the UCDP and NSFAS.
2.2 Improved and equitable participation rates	 Improved participation rates for various student demographics, particularly but not only for African and Coloured students and students with disabilities, will be determined as part of the enrolment planning process. There will be better marketing of support opportunities for students with disabilities, and improved visibility of structures that assist with accessing this support.

Outcomes	Strategies
2.3 Affordable student fees and accommodation	 Building on advice provided to the minister by the CHE, the Department developed an effective regulatory policy framework in cooperation with USAf, which was put in place in 2020. A life-cycle approach to infrastructure development and maintenance will be adopted in the construction of these colleges. The Department is exploring viable public–private partnerships, as well as alternative building methodologies which are energy-efficient and have lower maintenance costs, to increase availability of and access to affordable student housing.
2.4 A sustainable student financial aid system	 Free, full cost of tuition, education and learning support materials is being phased in over the period 2018–2022 for university students from poor and working-class backgrounds. A comprehensive student funding model to support all students who require it, including the 'missing middle' students, must be developed. The cost-sharing funding model for higher education will continue, and students who can afford tuition fees and can access non-state funding for higher education must continue to pay fees. The Department, in collaboration with other institutions, will develop multipronged funding strategies for the inclusion of people with disabilities in the PSET system.
2.5 Strengthened institutional differentiation	 Higher education institutions will be differentiated by extending and developing existing steering (planning, funding, monitoring and quality assurance) processes, in terms of the differentiation framework outlined in the White Paper: by mandate (informed by institutional type, i.e. traditional university, comprehensive university, university of technology or higher education college); and by institutional mission (informed by each institutions': location, positioning and distinct niche locally, regionally, nationally on the continent, and internationally; scope of involvement in undergraduate and postgraduate studies, research and open and distance education; infrastructural needs; and possibilities for new or strengthened teaching, learning, research, support, engagement, collaboration and partnerships). Private colleges and higher education institutions will be encouraged to provide complementary institutional and programme differentiation. The Department will negotiate and publish formal six-year agreements (two three-year rolling cycles, with a mid-term review) with each public university and higher education college, setting out their distinct institutional missions and scope of activities in accordance with institutional differentiation. Funding and funding frameworks will be adjusted where necessary, and possibilities for joint funding with other government departments (such as the DSI) investigated, to ensure adequate support for strengthened and institutional differentiation. Reporting and performance monitoring will continue as per existing regulation processes, supplemented by an explicit set of indicators to strengthen institutional differentiation. The Department will develop strategies to promote and support greater levels of intra- and inter-sector and, in particular, regional collaboration. The Department will continuously assess the entire PSET system (also considering the contributions of private PSET institution

Outcomes	Strategies
2.6 Adequate infrastructure to support teaching, learning and research	 Infrastructure development will prioritise existing projects and agreements, infrastructure maintenance backlogs, remodelling and modernising existing infrastructure, student housing projects, and selected new developments in line with integrated planning for a purposefully differentiated PSET system. Construction and deployment of new physical and ICT infrastructure will be guided by the Macro Infrastructure Framework and infrastructure management guidelines. The development of e-learning, workshop and work simulation infrastructure and equipment for all PSET institutions will be linked to overall PSET enrolment planning and PQM processes. Improved timetabling at all PSET provider institutions will ensure more efficient utilisation of available spaces from morning to evening and during weekends. The completion of the rural university campus connectivity project will take place as planned and will bring significant ICT infrastructural improvements to the higher education sectors by 2021. A life-cycle approach to infrastructure development and maintenance will be adopted in the construction of these colleges.
2.7 Sufficient staff to support expansion	 Establish partnerships to develop a clear understanding of the impact of the 4IR to prepare for this collectively and strategically. Research into optimal lecturer–student ratios across different academic fields of study will be undertaken, with a view to improving student success. The Department will explore possibilities for collaboration between local PSET teaching staff and South African educators in the diaspora (turning brain drain into brain gain), to strengthen teaching, research and community engagement. A recruitment strategy to encourage high-achieving postgraduate students to consider an academic career will be developed and implemented. Alignment between the NRF/DSI and DHET programmes for the development of career academics and researchers must be done to ensure effective utilisation of resources.
3.1 A diverse range of qualifications relevant to locality and responsive to community needs	 Universities will continue to offer three broad types of programmes: general formative programmes, leading to general degrees such as BA, BSc and BCom; professional programmes, leading to professional qualifications in areas such as medicine, law and education (e.g. MBChB, LLB and BEd); and career-focused programmes, leading to qualifications with a distinct vocational or technical focus (e.g. BTourism or BEngTech). All three programme types also incorporate foundational or extended curriculum programmes which support the development of students' foundational knowledge. Universities will also offer research-focused and professional postgraduate programmes. The Department will continue to support, and seek to incentivise, university Higher Certificate programmes offered in partnership with TVET colleges, especially in occupational fields that allow students to articulate directly into both workplaces and higher education. Institutions will be encouraged and supported to develop and strengthen their community engagement policies and strategies (e.g. service learning, engaged scholarship, participatory research, clinical service and institution-community-industry–NGO partnerships and collaborations). To this end: The CHE will be requested to advise on policy guidelines and reporting requirements for community engagement, by drawing on, among others, the South African Higher Education Community Engagement Forum. Community engagement should wherever possible be integrated into the teaching, learning and research components of programmes and institutions, with a view to building civic consciousness and critical citizenship both among the students and staff of the institution and among the communities with which they engage.

Outcomes	Strategies
3.1/cont.	 University engagement with and support for other PSET provider institutions (particularly in the TVET and CET sectors) should also be considered part of their community engagement role. The CHE will also advise on ways of stimulating the sharing of community engagement criteria, guidelines and good practices in institutions and at a national level, including a possible national awards system and specific forms of funding. Further research should be undertaken into the concept and practice of community engagement provincially, nationally and internationally. Education precincts and other collaborative initiatives to ensure better resource and infrastructure sharing across the PSET system are in the planning stage, and it is anticipated that public universities will play a critical role in leading and supporting these initiatives. In line with its Internationalisation Policy Framework for higher education, which will be implemented as part of this Plan, the Department will: seek to broaden outbound scholarship and academic exchange opportunities for South African students, particularly at postgraduate level, and to improve staff quality and qualifications; continue to encourage the inclusion of foreign postgraduate students in public universities; and encourage international partnerships between institutions, including offering of joint degrees linked to joint research programmes that build the research capacity and capability of public institutions and their international standing.
3.2 A diverse range of programmes responsive to the world of work	 The Department will review the guidelines and processes for enrolment and PQM planning to ensure that they are clear and responsive to the changing national and global context, and to this end will engage with universities through the enrolment planning process. Support will be provided for developing programmes and curricula that develop human resources in national priority areas. Public universities, in accordance with the joint DHET/DBE Integrated Strategic Planning Framework for Teacher Education and Development and other cooperative mechanisms, will continue to work towards the effective production of quality lecturers for the country's entire educational system, including initial teacher and lecturer education, professional development initiatives for schools and TVET and CET colleges, based on research into educational supply and demand imperatives. Higher education colleges with strong direct links to the world of work, such as nursing and agricultural colleges, will offer a diverse range of programmes that will be vocationally/occupationally oriented in order to develop graduates with knowledge and skills relevant to their specific sectors, such as health and agriculture.
3.3 A diverse range of mechanisms to improve research, innovation, commercialisation and entrepreneurship in higher education	 The quality of the research and innovation system can be substantially improved through greater policy coherence, collaboration and efficiencies: The DHET, the DST and the DTI will establish a formal collaborative mechanism for better aligning research and innovation policies, plans, targets and monitoring effective delivery. Universities will be supported to develop programmes which provide skills for the research and innovation system, informed by data from the LMIU and national priorities. The Department, in liaison with the DSI and NRF, will further promote institutional differentiation through identifying national and international centres of excellence in research and innovation. The NSF will be encouraged to fund and support research and innovation which cuts across PSET sectors, such as public–private partnerships between TVET colleges, universities of technology, private providers and industry in areas such as engineering, IT, agriculture, minerals and materials beneficiation, and other forms of applied research. Partnerships with key stakeholders will be established to enable the implementation of joint initiatives to strengthen linkages between research, innovation, entrepreneurship and commercialisation in higher education.

Outcomes	Strategies
3.3/cont.	 The Entrepreneurship Development in Higher Education Programme will be implemented to build entrepreneurship in universities, focused on developing student entrepreneurship, entrepreneurship in academia, and entrepreneurial universities. The Department will work with the DSI and the NRF to align programmes that are being implemented to promote research, innovation and commercialisation in universities, and to enable joined-up funding for these initiatives in order to maximise impact.
3.4 Programmes that prepare students for global advances in technology	• PSET provider institutions will ensure that their curricula are geared to the 4IR so that graduates are exposed to and can contribute to implementing and further developing emerging 4IR technologies such as automation, digitisation, robotics, artificial intelligence, machine learning, and the internet of things.
4.3 Improved links between education and training institutions and industry to strengthen research and innovation	 The Department will strengthen linkages with TIA, SEDA, the NRF, USAf and other government departments such as Trade and Industry and Small Business Development to enable the implementation of joint programmes to build innovation, technology transfer, and commercialisation capacity and outputs in universities, under the ambit of the Entrepreneurship Development in Higher Education Programme. The NRF's draft framework for engaging industry (with its two prongs of Joint Research Chairs and/or centres of excellence, and human capacity development through scholarships and internship exchanges) will form the basis for dedicated efforts to improve industry–university partnerships. Technology transfer and commercialisation capacity in universities will be strengthened through capacity enhancement programmes, data collection on technology transfer and through linkages with TIA, the NRF and sister government departments, under the umbrella of the Entrepreneurship Development in Higher Education Programme. Industry–university partnerships will be strengthened to leverage angel and venture capital investment to take university-generated intellectual property to the market.
4.4 Strong cooperative relations between employers and education and training institutions	• The DHET will investigate establishing a repository of engaged scholarship outputs to enable their wider availability, use and replication.
5.1 Improved quality of teaching and learning in PSET provider institutions	 The quality of teaching and learning will be made a central and explicit requirement of all PSET strategic planning, institutional missions and reporting mechanisms at both national and institutional levels. An enhanced and strengthened extended curriculum programme policy will be introduced with the next enrolment planning cycle, enabling more flexible support over multiple years of study. African languages will be promoted through the finalisation of the Higher Education Language Policy, focusing on: purposefully strengthening African language departments at universities in all indigenous languages (with at least one centre of excellence in each language) for the development of the languages themselves, for growth in research and scholarship in the languages, and for their use in particular fields of study (such as Foundation Phase teaching, health sciences, social work and other professional qualifications); developing clear language policies for all institutions, including promoting multilingualism for communication and administration purposes; developing a range of mechanisms to support teaching, learning and research in African languages, including establishing Centres for African Languages Teaching as well as research and development chairs; and the building of capacity and provision of focused resources over a five-year period by the Department (including the UCDG), DSI, DAC and PANSALB.

Outcomes	Strategies
5.1/cont.	 A national framework for strengthening university teaching will enable improved coordination and collaboration across institutions, greater consistency and better equity of provision, through: national, inclusive benchmarks for quality teaching; professional development for university teaching; promoting a scholarship of teaching and learning; recognising and rewarding teaching development support structures and resources. Professional, programme, curriculum and institutional development opportunities will include support for: the review and renewal of existing curricula to respond appropriately and responsibly to current imperatives and future trends; the creation of new curricula in institutional development priority areas; and institutional and cross-sectoral collaborative technology-enhanced teaching and learning projects, especially those aimed at replicating what is working well in some institutions. Postgraduate teaching and learning will be advanced through: setting and monitoring institutional targets for undergraduate/postgraduate mixes and honours, masters and PhD enrolments; support for better-quality and more effective models of doctoral study; investigating new methods of incentivising, rewarding, capacitating and professionalising postgraduate (and especially PhD) supervision; and a joined-up postgraduate funding and success strategy between the DSI and the Department. An integrated, holistic approach to student success will be promoted. Student analytics, early warning systems and interventions such as tutoring, mentoring and psychosocial support services that focus on retention beyond the first year, graduation in regulation time and improved success in gateway courses will be strengthened through the UCDP and joint efforts between the Department, universites and other partners.
5.2 Improved quality of research	 The building of individual staff research capacity across all PSET provider institutions will be developed through partnerships with universities. The full implementation of a system of national licences for key journal databases will be prioritised. The modernisation, digitisation and sharing of library operations and the development of open learning materials will be investigated. Regular monitoring and quality assurance of DHET-approved journals will continue. The number of permanent staff with doctorates will be increased to 75%. The number and capacity of a black professoriate will be increased. More efficient, effective and targeted use of existing PSET research capacities and resources will be encouraged and supported. Reporting procedures between higher education institutions and the Department will be reviewed to ensure that new information required by this Plan (e.g. in relation to institutional differentiation, community engagement and Codes of
Well-managed and -governed PSET provider institutions	 Good Practice) is collected in a streamlined manner, and that the Department has the necessary monitoring and oversight capacity. The TOC will continue to advise the Department on matters of institutional transformation, with a particular focus on developing a systemic framework for reporting and monitoring transformation indicators. The Department will formulate clear criteria for the appointment (or, where necessary, replacement) of members of council in public higher education institutions, along with guidelines indicating their roles and responsibilities. Codes of Good Practice for institutional governance will be operationalised.

Outcomes	Strategies
5.3/cont.	 In partnership with the UCCF, all members of council (including council chairs, ordinary members of council, and new members of council) at all public higher education institutions will receive targeted, fit-for-purpose training, support and induction. Continued support for student governance will be provided at both institutional and national levels. The HELMP will focus on developing leadership and management capacity in universities.
5.4 Well-qualified staff in the PSET system	 The SSAUF is the main national vehicle addressing staff development imperatives at universities, especially with regard to equity targets in senior academic positions, as well as staff capacity development, professional development and the general rejuvenation of the academic profession. The UCDP, through its various staff development sub-programmes, will address staff capacity and professional development imperatives: The NESP will recruit postgraduate students into academic intern positions as a first step towards an academic post. The nGAP will recruit young people into permanent academic positions. Initiatives to increase the number of university academics that hold doctoral degrees will be implemented, such as the USDP. The HELMP will focus on developing leadership and management capacity in universities. An FPP will be implemented to grow the pool of black and women professors. The equity and transformation plans of all universities will include visible strategies to improve equity amongst academic, support and management staffing cohorts at all (and especially senior) levels, which the Department will closely monitor.
5.5 Improved quality assurance capability	 A review of the role of the CHE will be undertaken, with an eye to strengthening its advisory function. The current system of programme accreditation will be reviewed to improve efficiency and effectiveness. A framework for a new round of audits and national reviews by the CHE was developed by the end of 2020, since these play a crucial role in triangulating information about the performance of the sector and the quality of particular fields.
5.6 Improved quality of infrastructure	 The Department, guided by its Macro Infrastructure Framework, will continue to provide Infrastructure and Efficiency Grants to support teaching, learning and research infrastructure at higher education institutions, focusing also on reducing maintenance backlogs. Institutions will be required to assess the lifespan of research equipment to permit advance planning for upgrades or replacements, where possible taking foreign exchange fluctuations into account and arranging forward cover. The completion of the second phase of the Rural/Remote Campus Connectivity Project will improve student and staff access to broadband connectivity and online resources. The Policy on Distance Education allows for the provision of distance education (including flexible and mixed mode/blended programme delivery) by all public universities, which provision must align with institution missions, enrolment planning, approved PQMs and higher education strategies to take full advantage of changes in technology to support teaching, learning research, management and governance. Implementation of these strategies will be supported at public institutions though the infrastructure grants.
5.7 Safe and healthy environment for students and staff	 Appropriate interventions will be implemented to promote the health and safety of students and staff, guided by the policy framework. The Department will provide an enabling environment (through policies, guidelines, protocols, etc.) to address gender-based violence in the PSET system guided by the policy framework.

Outcomes	Strategies
6.1 Increased throughput in qualifications	 Sectoral-level performance indicators for student throughput, completion and success, including student, staff and curriculum development and trends in high dropout areas, will be monitored annually through cohort studies conducted using HEMIS data. The Department will continue to utilise cohort analysis to provide a more accurate picture of completion (including time to graduate) in the higher education sector and inform decision-making and possible interventions. The UCDP will support the establishment of a comprehensive, integrated approach to developing student analytics capacity, early warning systems, student advising systems and a range of student support services that address academic, psychosocial and life/logistic needs.
6.2 Improved exit outcomes related to the world of work	• The Department will assist higher education institutions to gather essential data on graduate destinations, which can be used to inform systematic tracer studies.

Strategies for SAQA and the quality councils

Outcomes	Strategies
1.1 Clear and streamlined roles and responsibilities of key stakeholders and role players	 The duplication of key regulatory processes that has characterised the work of the quality councils – the Council on Higher Education (CHE), Quality Council for Trades and Occupations (QCTO) and Council for Quality Assurance in General and Further Education and Training (Umalusi), as well as the South African Qualifications Authority (SAQA) – must be addressed and will require a review and possible amendment of the NQF Act, to refine their roles, responsibilities, functions and funding frameworks and enhance their efficiency.
1.2 Improved capability for integration, coordination and articulation in the PSET system	 The Department will work with institutions and quality councils to ensure that qualifications and related curricula are in place to produce the full range of programmes for occupations in high demand. The Department, in liaison with the DBE, QCTO, SAQA and Umalusi, will review all NQF Level 4 general vocational qualifications (including their purposes, design, curricula, streams, teaching expertise required, and locations of offering), and in the process also: consider issues of alignment and articulation between the DBE's three-stream (academic, technical occupational, and technical vocational) schooling model, and current and proposed future TVET qualifications; address overlaps between the NCV, offered at TVET colleges, and the NSC (Technical), offered at schools, particularly technical schools; examine the scope and articulation possibilities of the DBE's second-chance programmes, in themselves and in relation to GETCA and NASCA; and assess current and planned capacity to offer these qualifications in schools, CET and/or TVET colleges. In line with the National Skills Development Plan 2030, Outcome 4, which aims to increase access to occupationally directed programmes: the occupational qualification type (i.e. purpose, credits, etc.); the Department will engage intensively with the QCTO as to what <i>should</i> and <i>should not</i> be specified in qualification nomenclature and terminology on the NLRD and correct all administrative errors with respect to the registration of accredited programmes, will be replicated for TVET and CET.
1.2/cont.	• The duplication of key regulatory processes that has characterised the work of the quality councils – the Council on Higher Education (CHE), Quality Council for Trades and Occupations (QCTO) and Council for Quality Assurance in General and Further Education and Training (Umalusi), as well as the South African Qualifications Authority (SAQA) – must be addressed and will require a review and possible amendment of the NQF Act, to refine their roles, responsibilities, functions and funding frameworks and enhance their efficiency.
1.3 A simplified NQF	 The Department will work together with SAQA and the quality councils to address all NQF-related issues, including development of policies on NQF matters, confirmation and refinement of qualifications, and simplification of NQF nomenclature. The quality councils, together with SAQA, will simplify the accreditation and registration processes. The sub-frameworks, particularly the HEQSF and the OQSF, should be reviewed to ensure alignment and reduce the proliferation of programmes leading to qualifications.

Outcomes	Strategies
1.4 Increased articulation for students between and within the NQF sub-frameworks, and between and within institutions	 A joined-up planning process between the Department and the DBE, CHE, QCTO and Umalusi regarding changes to higher education, TVET and CET programmes between now and 2030 will be initiated, and will require discussion of a change to Notice 1040 of 2012; development of NOCs; review and replacement of N4, N5 and N6 by Higher and Advanced Certificates; and a review of the 240-credit Diploma. When qualifications are designed and developed, planned articulation routes must be mapped out at the outset, as linked to the primary purposes of the qualifications. The capacity of SAQA to gather and track reliable systemic data through the NLRD will be developed. The roles of the quality councils in providing data to the NLRD will be defined and strengthened. The Department will investigate establishing a mechanism to monitor articulation blockages and make recommendations for improvement. A communications strategy will be implemented, focusing on developing an understanding of the NQF as a framework and what it means to articulate from one qualification to another in a cognate knowledge/practice area, etc. The Department will investigate an integrated quality assurance and data system that spans across SAQA and the quality councils.
1.5 Aligned policy and legislation	 Clarification of the roles and responsibilities of SAQA and the quality councils will require a review of the NQF Act. The collection of unit record data will need to be aligned with the Protection of Personal Information Act. The NQF Act will be reviewed, considering the recommendations of the report of the NQF evaluation undertaken by the Department in collaboration with the DPME. NQF-related policies will be reviewed to eliminate contradictions.
3.2 A diverse range of programmes responsive to the world of work	 The QCTO and SAQA will review all NQF Level 2 and 3 certificates and NQF Level 4 NOCs regarding the relative proportions of their theoretical, practical and workplace experience components, and whether in some cases simulated workplace experience would constitute an appropriate and feasible substitute for actual workplace experience. This would require an amendment to the SDA definition of occupational programmes.
4.2 Improved links between education and training institutions and employers for WPBL	 A systemic planning and advocacy strategy will be developed by the Department, supported by the QCTO and the CHE, to improve and increase WPBL opportunities and partnerships across the system. Quality assurance arrangements will be clarified to accommodate different types of WPBL, focusing on assessment where WPBL is linked to a qualification, or focusing on work-readiness where WPBL involves internships (which should also link to professional registration).

Outcomes	Strategies
5.5 Improved quality assurance capability	 CET colleges Umalusi will oversee the assessment and certification of the GETCA and NASCA. The QCTO will oversee the assessment and certification of skills/occupational programmes.
	 TVET colleges The QCTO will oversee the development of qualifications for occupations based on the ministerially approved annual OIHD list, with the support of data collected by the LMIU and through engagements with relevant industry associations and government departments. More specifically: In line with the recent GIZ evaluation of QCTO processes, the QCTO will appoint additional specialised staff for qualification design and development and prioritise the development of qualifications initially across the largest occupational clusters (such as engineering and technology, business administration and services, and health and social care). This process will include the use of field experts and external facilitation, a more explicit role for stakeholders, and the consolidation of several curriculum development initiatives currently under way at colleges, private education and training institutions and through the Department. The QCTO will develop curriculum and assessment specifications, particularly artisan qualifications. The Department, together with the QCTO, is reviewing the TVET examination system, with an eye to streamlining and reducing external examinations and introducing rigorous internal examinations, to both improve efficiency and build lecturers' capacity for diagnostic and continuous assessment and remediation. The quality assurance functions of all quality councils concerned with the TVET sector are currently being reviewed and amended to improve efficiencies. Higher education institutions A review of the role of the CHE will be undertaken with an eye to strengthening its advisory function. The current system of programme accreditation will be reviewed to improve efficiency and effectiveness. A framework for a new round of audits and national reviews by the CHE was developed by the end of 2020, since these play a crucial role in triangulating information about the performance of the sect
Provision of adequate fiscus funding to education and training institutions and supporting institutions	A study will be undertaken to evaluate how fiscal and SDL funds are currently, and in future could be better, distributed to SAQA, the QCTO, the CHE and Umalusi. It will also take into account the planned streamlining of institutional quality assurance roles and responsibilities currently under way and the funding needs of other supporting institutions (such as the HRDC).

Strategies for skills levy institutions

Outcomes	Strategies
1.1 Clear and streamlined roles and responsibilities of key stakeholders and role players	 The NSA will be restructured and refocused to monitor and evaluate SETAs. SETAs need to concentrate their efforts on supporting skills planning through engagement with industry, ensuring that funding is allocated to support provision against demand, and enabling access to and strengthening provision of workplace-based learning (WPBL).
1.2 Improved capability for integration, coordination and articulation in the PSET system	 The SETAs will support implementation of enrolment plans through funding. They will also be guided by the Department to use LMIU data to encourage employer and labour voice and participation in verifying occupations in demand, and to encourage partnerships between institutions and workplaces and between public and private providers, especially but not only regarding WPBL opportunities. SETAs will provide the funding to plan and develop work-integrated learning platforms that enable structured work-integrated learning, including effective mentoring and assessment.
3.1 A diverse range of qualifications relevant to locality and responsive to community needs	• A joined-up funding strategy, which will consolidate programme funding processes from government, industry, the SETAs and the NSF, will be developed to ensure that all required TVET programmes are effectively funded.
4.1 Improved interface between education and training institutions and skills levy institutions	 SETAs will: engage with workplaces to collect data on the skills of their existing workforce as well as their projected skills needs; engage with stakeholders (including but not only employers, labour and government) to ascertain their perceptions of future trends in their sectors and the implications thereof for the demand for and supply of skills; report such data and trends to the LMIU to inform enrolment planning processes; and standardise their timelines, with clear milestones for: reaching sector agreement about occupations required for economic growth and employment and social development; issuing requests for programme proposals; determining funding for provider capacity development; and awarding grants to workplaces and education and training institutions. SETA and NAMB quality assurance functions are being integrated into the QCTO, as stipulated by the White Paper and NSDP 2030, and SETAs are henceforth responsible for workplace assessment (vetting). SETA and NSF planning cycles will be aligned with the MTSF five-year and the MTEF three-year cycles. The Department will undertake a three-year review of each SETA's contribution to the intended objectives of the system (and the NDP in particularly but not only in IT, human resources and regional offices) to promote a more efficient and cost-effective use of resources. To this end, the Department will, as an immediate priority, develop a business case for shared services, outline provisions for the appointment and remuneration of SETA staff, and commence work on standardised systems for application, grant disbursement, workplace approval and data management. Until it has developed its own capacity, the Department and skills levy institutions will continue to partner with higher education institutions and research institutions to undertake the analysis of Workplace Skill



higher education & training Department: Higher Education and Training REPUBLIC OF SOUTH AFRICA

