

Three-stream model and envisaged articulation opportunities

DHET RESEARCH COLLOQUIUM

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PRESENTATION OUTLINE

1. Background and introduction
2. Strategic Direction
3. Three Stream Model
4. Articulation opportunities
5. Responses to the NQF Research
6. Conclusion

STRATEGIC DIRECTION

*“The different **parts** of the education system should work together allowing learners to take **different pathways** that offer high **quality** learning opportunities.”*

(National Planning Commission: National Development Plan, November 2011)

No Quality without Inclusion and Equity

'Inclusion and equity in and through education is the cornerstone of a transformative education agenda, and we therefore commit to addressing all forms of exclusion and marginalization, disparities and inequalities in access, participation and learning outcomes. No education target should be considered met unless met by all.'

*World Education Forum: Incheon Declaration
2015*



NDP TARGETS

*“One of the **targets** set for **2014** in the delivery agreement signed by the Minister of Higher Education and Training is to produce **10 000 artisans** per year. This target can be met with concerted effort and adequate funding. We propose a **target** of **30 000** by **2030**, subject to demand.”*

National Planning Commission: National Development Plan, November 2011)

NATIONAL DEVELOPMENT PLAN (cont.)

- The education sector is required to play a greater role in:
 - Building an **inclusive society**, providing equal opportunities and helping all South Africans to realise their full potential
 - Providing **inclusive education** that enables everyone to participate effectively in a free society
 - Mediating the **high drop-out rate** of learners in the basic schooling system
 - Increasing the number of **learners entering vocational** and occupational pathways, training 30000 artisans per annum by 2030
 - Creating opportunities for **persons with disabilities** to have access to meaningful **employment**.

SUSTAINABLE DEVELOPMENT GOALS (SDG 4)

- The introduction of Technical Vocational Qualifications must respond to [Sustainable Development Goal 4](#), namely to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”, and has three priority areas:
 - Fostering youth employment and entrepreneurship
 - Promoting equity and gender equality
 - Facilitating transition to green economies and sustainable societies.

International Best Practice in improving quality, equity and efficiency

- Review success strategies in countries that do well in international assessments such as PISA:
 - Excellence through equity
 - Nurturing top performance and tackling low performance
 - Extending school hours
 - Introduce and resource structured additional support at schools
 - Promote inclusion rather than referral to segregated / parallel systems
 - Strengthening teaching and learning support
 - Introduce technical vocational education

Problem Statement

- About one third of those aged 15-24, or 3.4 million people, are not formally employed nor in education or training (**NEET**). Two million of them have not finished Grade 12.
- The failure to integrate so many people into the labour market **threatens social cohesion**.
- The rate of early **school leaving before Grade 12**, peaking in Grade 10 and 11 (15,2% in 2012).
- Many learners from the senior phase onwards do not achieve to their full potential because of the **unavailability of curriculum offerings that meet their aptitudes and interests**.
- 40 000 learners currently following **technical occupational** subjects in so-called schools of skill and other special schools without the necessary articulation into further education pathways.
- The **success rate in artisan training** is relatively low and could be improved if learners already have access to vocational and occupational education at school



*'Inclusion and equity in and through education is the cornerstone of a transformative education agenda, and we therefore commit to addressing all forms of **exclusion and marginalisation**, disparities and **inequalities in access**, participation and learning outcomes. No education target should be considered met unless met by all.'*

World Education Forum, Incheon Statement, 2015



RECOMMENDATIONS FROM CONSULTATIONS WITHIN THE BASIC EDUCATION SECTOR

- The DBE should undertake a costing geared at a Basic Education Sector which would be **40% Academic Stream and 60% Technical Occupational and Technical Vocational**.
- There should be assurance that there is **articulation** from the Technical Vocational Stream in the Basic Education Sector with the curriculum offered in Technical and Vocational Education and Training (TVET) colleges; and
- The **cost implications** of the introduction of the Three Streams Model, as well as the readiness to have this implemented in provinces, taking the material conditions in each province into account.

THREE STREAM MODEL

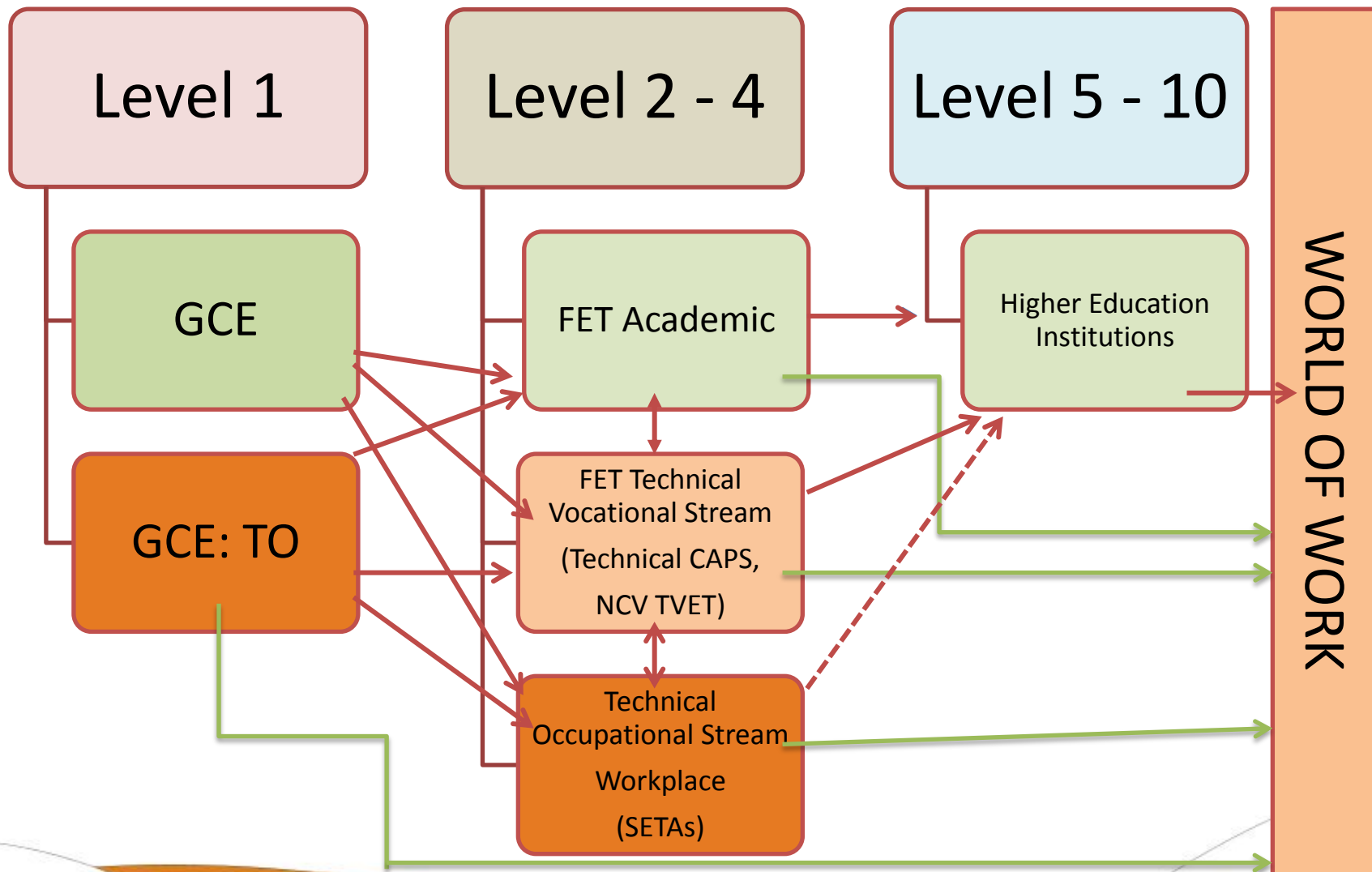


THREE STREAMS

- Academic Stream
- Technical Vocational Stream
- Technical Occupational Stream



PROPOSED MODEL: GCE/GCE:TO



ACADEMIC STREAM



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NDP TARGETS

"The Department of Basic Education plan is to **increase** the number to **300 000** by **2024**, with **350 000** learners passing **mathematics** and **320 000** learners passing **physical science**. The Commission proposes a target for **2030** of **450 000** learners being eligible for **bachelors programme** with maths and science. Action is required throughout the education system, but particularly in **early childhood development** given that the cohort that will enter university in **2030** has not yet started primary school. Consideration should be given to **expanding** the **Dinaledi Schools** initiative, which increases access to maths and science in **underprivileged schools**."

National Planning Commission: National Development Plan, November 2011

ACADEMIC STREAM

- **MST strategy** to increase and strengthen participation
- **Rationalise** schools offering the **same subjects** side by side
- **Improve** subject **selection** and **combination**
- **Improve career guidance**
- **Improve** teaching and learning **support** systems



FOCUS SCHOOLS

- **Strengthen** legislative and policy frameworks
- **Focus Schools Guidelines** have been **approved** by CEM (09 March 2017). Circular soon to be released.
- **Align** the establishment to **economic zones/ corridors/ sector**

TECHNICAL VOCATIONAL STREAM



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TECHNICAL VOCATIONAL PATHWAY

- Technical Maths
- Technical Sciences

Civil Technology

- Construction,
- Woodworking, and
- Civil Services.

Electrical Technology

- Power Systems,
- Electronics, and
- Digital Systems.

Mechanical Technology

- Automotive,
- Fitting and Machining, and
- Welding and Metal Work.

CAPS : TECH SUBJECTS

37 093 Learners

1 647 Grade 11 Educators

Trained in Specialisations

Partnership established with
merSETA (R30 million)



Overall Learner Participation in Technical Subjects (2008-2016)

YEARS	EGD	CIVIL	ELECTRICAL	MECHANICAL	TECHNICAL MATHS	TECHNICAL SCIENCES	TOTAL	INCREASE/DECREASE
2008	22 821	8 733	6 403	6 910			22 046	
2009	22 670	8 478	5 338	6 442			20 258	-1778
2010	24 458	8 522	5 305	6 333			20 160	-90
2011	22 599	7 954	4 331	5 470			17 755	-2335
2012	23 812	8 597	4 725	5 484			18 806	+1051
2013	26 076	8 849	4 988	5 891			19 728	+922
2014	24 934	8 961	5 143	6 108			20 212	+484
2015	27 706	10 085	5 780	6 523			22 388	+2176
2016	48675	14 517	10 836	11 740	14 341	17 459	37 093	+14705

Please Note: The data from 2008-2015 is for Grade 12 learners

The 2016 data is for Grade 10 (CAPS for Technical Schools implementation)

The data increase/decrease does not include EGD numbers (comparison of specialisations only)

TECHNICAL OCCUPATIONAL STREAM



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NDP GOAL AND OBJECTIVE

*“Provide **inclusive education** that enables everyone to participate effectively in a free society. Education provides **knowledge** and **skills** that people with **disabilities** can use to exercise a range of other **human rights**, such as the right to political participation, the right to **work**, the right to live **independently** and contribute to the community, the right to participate in **cultural life**, and the right **raise** a family. Ensuring that all children with disabilities have **access** to **quality** education will help South Africa meet its employment **equity** goals in the long run.”*

National Planning Commission: National Development Plan, November 2011)

Participation in the 2017 Pilot

PROVINCE	DISTRICTS	NUMBER OF SCHOOLS OF SKILLS	LEARNERS	TEACHERS
EC	Buffalo City, Nelson Mandela Bay	3	1728	131
FS	Fezile Dabi, Lejweleputswa, Motheo, Thabo Mofutsanyana	7	1979	193
GP	14 of all 15 Districts	16	10269	1159
KZ	Amajuba, Umgungundlovu, Umlazi	4	2212	114
LP	Capricorn, Waterberg	4	1923	137
MP	Gert Sibande, Nkangala	6	1732	151
NC	Frances Baard, Namaqua	2	491	47
NW	Bojanala, Dr K Kaunda	5	2429	80
WC	All 8 districts*	20	7920	495
National	40	67	30683	2507

Source: Provincial Inclusive Education Directorates, January 2017

* Western Cape commenced programme earlier

Technical Occupational Subjects

No	Subjects	SPECIALISATION/SUBJECT SUB SECTIONS
A. General Subjects		
1 - 4	Language Mathematics Life Skills	HL, FAL, Functional Maths, Creative Arts, Social Sciences, Life Skills, Physical Education and Sport, Natural Science, Computer Application Technology
B. Skills and Vocational Subjects (Electives)		
5.	Agricultural Studies	Plant production, Animal husbandry ,Gardening
6.	Art and Crafts	Craft production, Working in different Materials
7.	Office Administration	Office Practice Computer Application Technology, Client services and communication
8.	Early Childhood Development	Child Development and Care, Resource Development (for learning)
9. – 12.	Mechanical Technology: Motor Mechanics Body Works Welding Sheet Metal Work	Motor Mechanics, Panel Beating and / or, Spray Painting, Welding , Metalwork Welding, Sheet metal work
13.	Electrical Technology: Electrical	Electrician Work, Air conditioning and refrigeration
14. – 16.	Civil Technology: - Bricklaying and Plastering - Plumbing - Woodworking and Timber	Bricklaying; Plastering, Brickmaking Plumbing, Solar Systems Carpentry, Joinery, Shuttering



Technical Occupational Subjects...

No	Subjects	SPECIALISATION/SUBJECT SUB SECTIONS
17 - 19.	Personal Care: - Hairdressing and Beauty Care - Beauty and Nail Technology - Ancillary Health Care	Hairdressing, Cosmetology Beauty Care, Nail Technology -Baby Care: Baby Care, First Aid, Cooking, Cleaning and Housekeeping , - Life Care: Adult/ geriatric care, First Aid, Cooking, Cleaning and Housekeeping, -Personal Care: Disability Care, Technology, First Aid, Cooking, Cleaning and Housekeeping
20 - 21.	Service Technology: - Upholstery - Maintenance	Upholstery; Leather work; Industrial sewing Plumbing; Painting; Electrical; Mechanical; Glazing; Tiling and Flooring; Bricklaying and Plastering; Welding; Woodwork
22 - 23.	Consumer Studies: - Food Production - Sewing	Food production; Food and nutrition; Entrepreneurship; The consumer Machine sewing; Soft furnishing and upholstery; Patchwork, Quilting and Embroidery, Knitting and Crocheting; The consumer
24.	Hospitality Studies	Food and beverages services; Watering; Cleaning and Housekeeping, Client Service and communication
25.	Wholesale and Retail	Wholesale and Retail Studies
26.	Security Services	Security Services (to be completed)



REFLECTIONS ON THE STUDY IN RELATION TO DBE'S WORK AND RESPONSIBILITIES



Reflections on DBE's Work & Responsibilities from the Study

- The 'Training' in GET is not provided for in DBE and the sector therefore does not benefit from the provisions of the NQF Act
- DBE still needs to conceptualise and clearly define the Theory of Change that informs the introduction of the Three Stream Model in line with the NQF
- There is currently no co-ordination and co-operation between DBE and DHET institutions to ensure articulation and portability between programmes – hence the proposed establishment of a Task Team that will include Quality Councils and other bodies to oversee the Three Stream Model
- Currently, grade 9 learners find it difficult to articulate to TVET colleges but only those who have unsuccessfully completed the NSC

SUCCESSSES AND CHALLENGES OF NQF IN THE SECTOR



NQF Successes and Challenges in the Basic Education Sector

Successes:

- The NQF did clarify the role functions of DHET and DBE through the sub-frameworks
- The fragmentation between Education and Training has been addressed to some extent

Challenges:

Vocational Education is not adequately addressed in the Basic Education sector, resulting in:

- Learners exiting with a NSC (NQF Level 4) and re-entering a TVET College at NQF Level 2 to attain a vocational qualification
- Lack of alignment and articulation between the NSC and the NCV with regard technical vocational education
- Too few learners accessing and succeeding in Occupational and Trade pathways
- The fact that the Schooling Sector falls exclusively under Umalusi as a quality council is restrictive in terms of Technical Vocational and Occupational Education

RECOMMENDATIONS FOR IMPROVEMENTS TO THE NQF



Recommendations for improvements to the NQF

- In view of the need to rationalise Technical Vocational and Occupational Education and Training Qualifications across the Basic Education and Higher Education and Training sector, it would be valuable to have a less rigid delineation between the sub frameworks overseen by Umalusi and the QCTO respectively.
- Although fragmentation between education and training has been rationalised in the post-schooling sector, this has not materialised in the schooling sector.

IDENTIFIED GAPS IN THE STUDY



Gaps in relation to the evaluation study

- The study did not give enough attention to progression of learners from formal schooling into Vocational and Occupational Pathways
- It does not pay focused attention on the 'workplace training' requirement at GET level
- The Study could have explored a possibility of 'Technical Team' from DBE that would work with the NQF Directorate at DHET



Parity of Esteem

- “ For the realisation of the positive vision of what we want our vocational education system to look like, it is important to recognise that the fundamental issue is not, ultimately, how we **compare academic learning on the one hand with vocational education, including apprenticeships**, on the other. The real issue is about **how our vocational education relates to the world of work and our current and future workforce requirements** in all sectors of the economy. If we get that right, by ensuring that all vocational education is of high quality, is up-to-date with current and (expected) future industry practice, and provides the skills and work-readiness that employers are looking for, **then vocational education will soon enough come to be seen as being of equal value to the academic route.**” (Sir Michael Wilshaw, Chief Inspector of Schools, United Kingdom, 2015)



NDP VISION STATEMENT

*“We, the **people** of South Africa, have **journeyed** far since the long lines of our first **democratic** election on 27 April 1994, when we elected a government for **us** all.*

*We began to **tell** a **new** story then. We have lived and **renewed** that story along the way.*

*Now in **2030** we live in a country which we have **remade**...”*

National Planning Commission: National Development Plan, November 2011)



**“IT IS IN YOUR
HANDS TO
CREATE A BETTER
WORLD FOR ALL
WHO LIVE IN IT.”**

NELSON MANDELA

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Thank you!

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