




BUILT ENVIRONMENT



Your playing small does not
serve the world.
Who are you not to be great?



South African Council for Graduates Co-operative
Competent Graduates, Profitable Co-operatives

Thamsanqa Maqubela
Executive Chairman
chairman@cooperativecouncil.co.za

BUILT ENVIRONMENT FOR INNOVATION & SKILLS DEVELOPMENT

NOVEMBER 28, 2017

PORTFOLIO COMMITTEE: PUBLIC WORKS



public works
Department:
Public Works
REPUBLIC OF SOUTH AFRICA

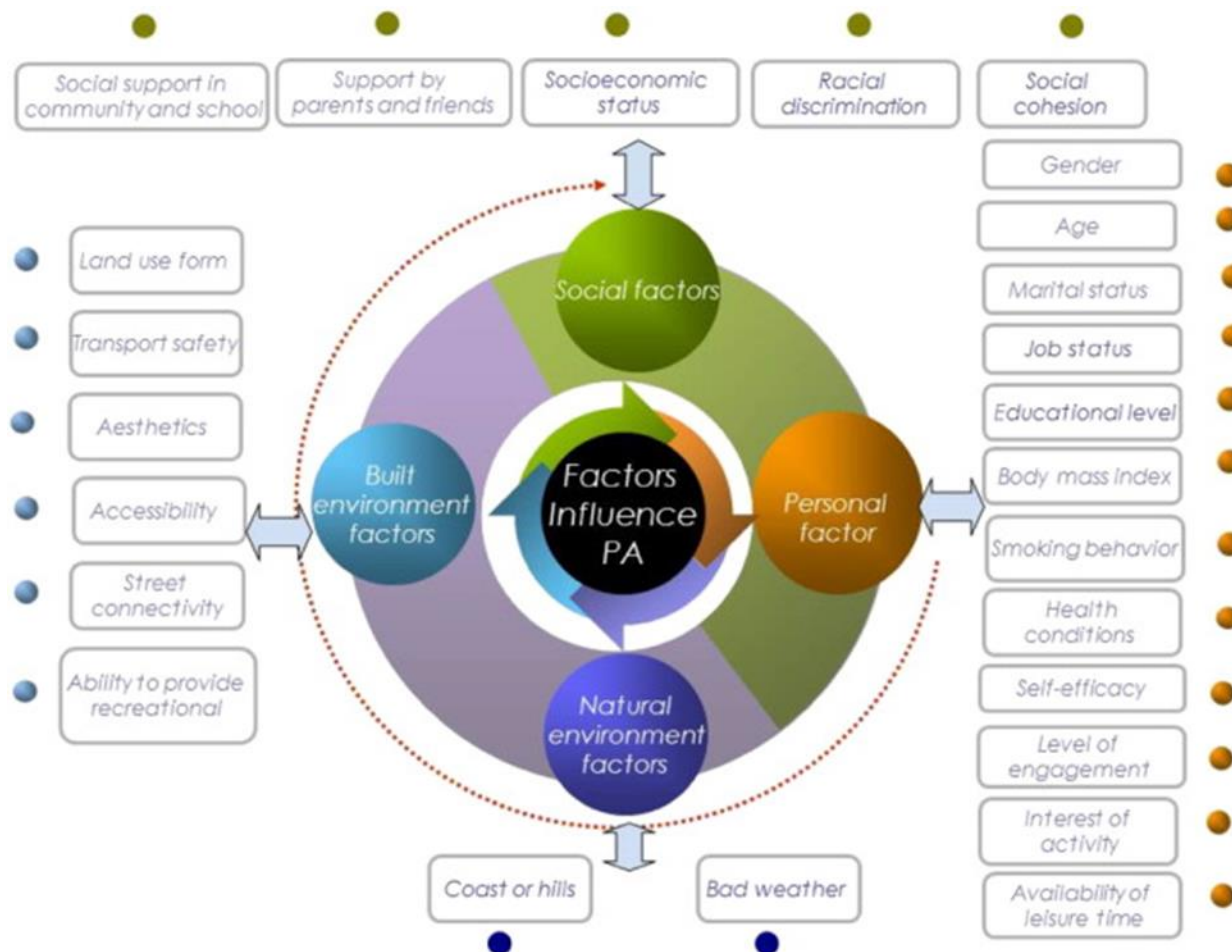
**BUILT ENVIRONMENT IS NOT JUST ABOUT BEAUTIFUL SKYCRAPERS, IT
IS ABOUT SUSTAINABLE LIVELIHOODS AND QUALITY OF HUMAN LIFE**



SUSTAINABLE BUILT ENVIRONMENT



INTERGRATED BUILT ENVIRONMENT



The wheel shows the full scope of the SP Group within the business area Built Environment. The areas in which the unit is most active are highlighted in light green.

BUILT ENVIRONMENT: TWIN CHALLENGES

ENVIRONMENT FACTORS: GLOBAL WARMING

- Construction and the built environment make a substantial contribution to global warming and play a significant role in most economies.
- Environmental, social and economic impacts attributed to the built environment at a global scale are outlined below.
 - Consumes 40% of energy use,
 - Consumes 17% of fresh water use,
 - Consumes 25% of wood harvested,
 - Consumes 40% of material use
 - Employs 10% of the world's work force
 - Buildings are typically located on the most productive land (Estimated to be 250 million hectares world wide, mostly on primary agricultural land).

SOCIO-ECONOMIC FACTORS: UNEMPLOYMENT, SQUATTER CAMPS & POOR WORK CONDITIONS

- The Construction and built environment have a bad reputation for exploiting employees in the lower strata.
- Growing unemployment, evasive transformation and declining earnings are factors that continue to trouble the built environment industry and sector.
- Allegations of corruption and price collusion by big players in the industry;
- Limited uptake of BLACK graduates as professionals in the sector;
- Unfair competition and BBBEE fronting.

NEGATIVE EFFECTS OF BUILT ENVIRONMENT

- In South Africa the built environment is directly responsible, through electricity consumption, for over 23% of South Africa's carbon emissions.
- Vehicle-based infrastructure and transport planning has resulted in transport contributing to 16% of South Africa's CO₂ emissions and an additional 18mt CO₂ per year, or about 4% of South Africa's CO₂ emissions, come from the manufacture of building materials (CIDB 2009).

THE CONTRIBUTION OF THE BUILT ENVIRONMENT

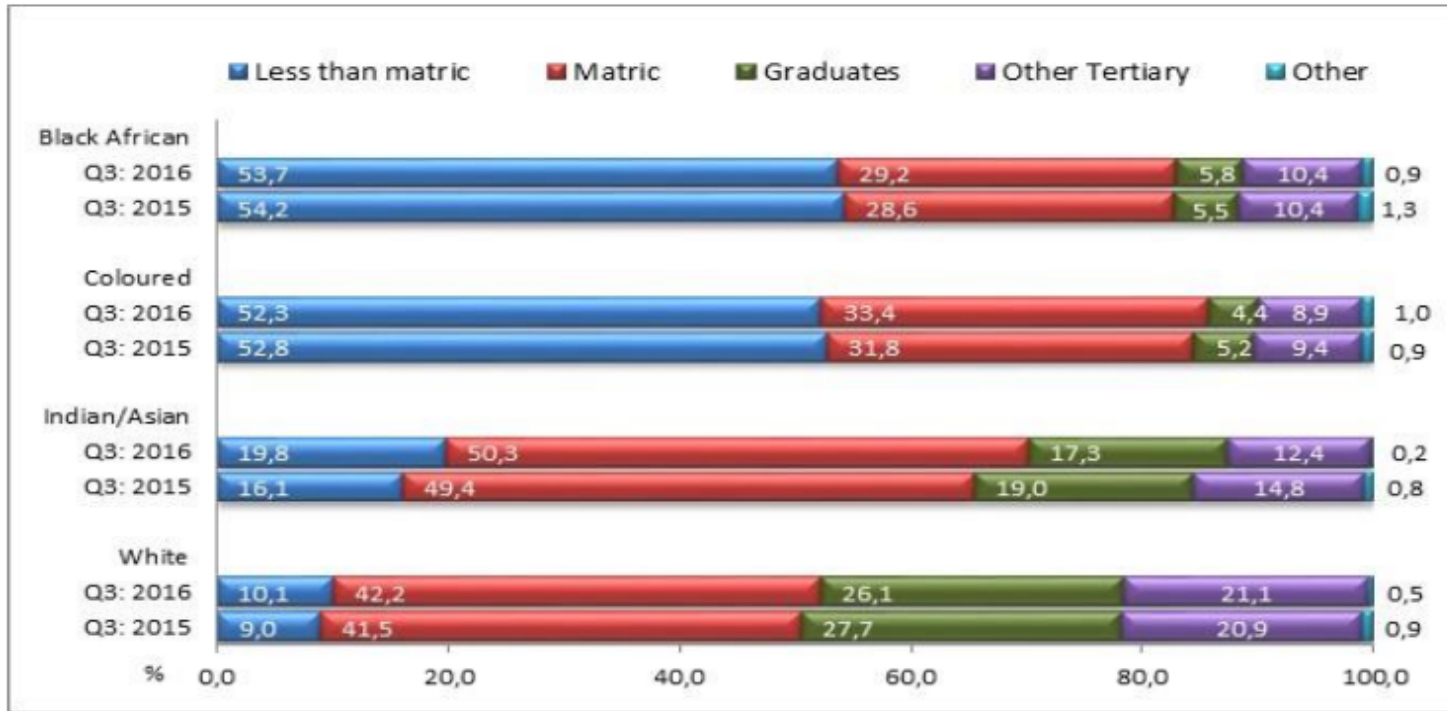
- Sustainable development, which aims to achieve social and economic improvement while reducing, or avoiding, negative environmental impacts can be used to address the climate change, poverty and skills challenges in South Africa.
- However sustainable development is difficult to achieve. It requires a holistic and integrated approach and the development sector and in particular, the construction industry, tends to operate in a highly fragmented way.
- The application of sustainable development is also not well understood and has not been adequately translated into practical actions that can be implemented.

BUILT ENVIRONMENT FOR GRADUATES

- The built environment is a broad sector that affects the world you see around you. It covers infrastructure (eg roads, railways, tunnels, bridges and dams); buildings; and the systems that make buildings useable, such as heating and ventilation.
- The sector employs engineers in civil, structural, building services, environmental and geotechnical roles, as well as some specialists in areas such as acoustics. The main employers are consultants, who advise clients, develop designs and oversee projects, and contractors, who carry out building work. Engineers are also recruited by developers and by large clients, such as retailers and local authorities.

EMPLOYMENT RATE OF GRADUATES 2017

STATS SA RESEARCH, QUARTER 3 – 2016: GRADUATE EMPLOYABILITY BY RACE



Note: 'Graduate' includes post-higher diploma, bachelor's degree, post-graduate diploma, honours degree and higher degree.
Values for 'Other' are not shown on the graph.

The share of employed persons with tertiary qualifications (graduates and other tertiary) was highest among the white and Indian population groups. In Q3: 2016, 47,3% of employed white population and 29,7% of employed Indian/Asian population had a tertiary qualification, while the share of the employed with tertiary qualification among the black African and the coloured population was only 16,2% and 13,3% respectively.

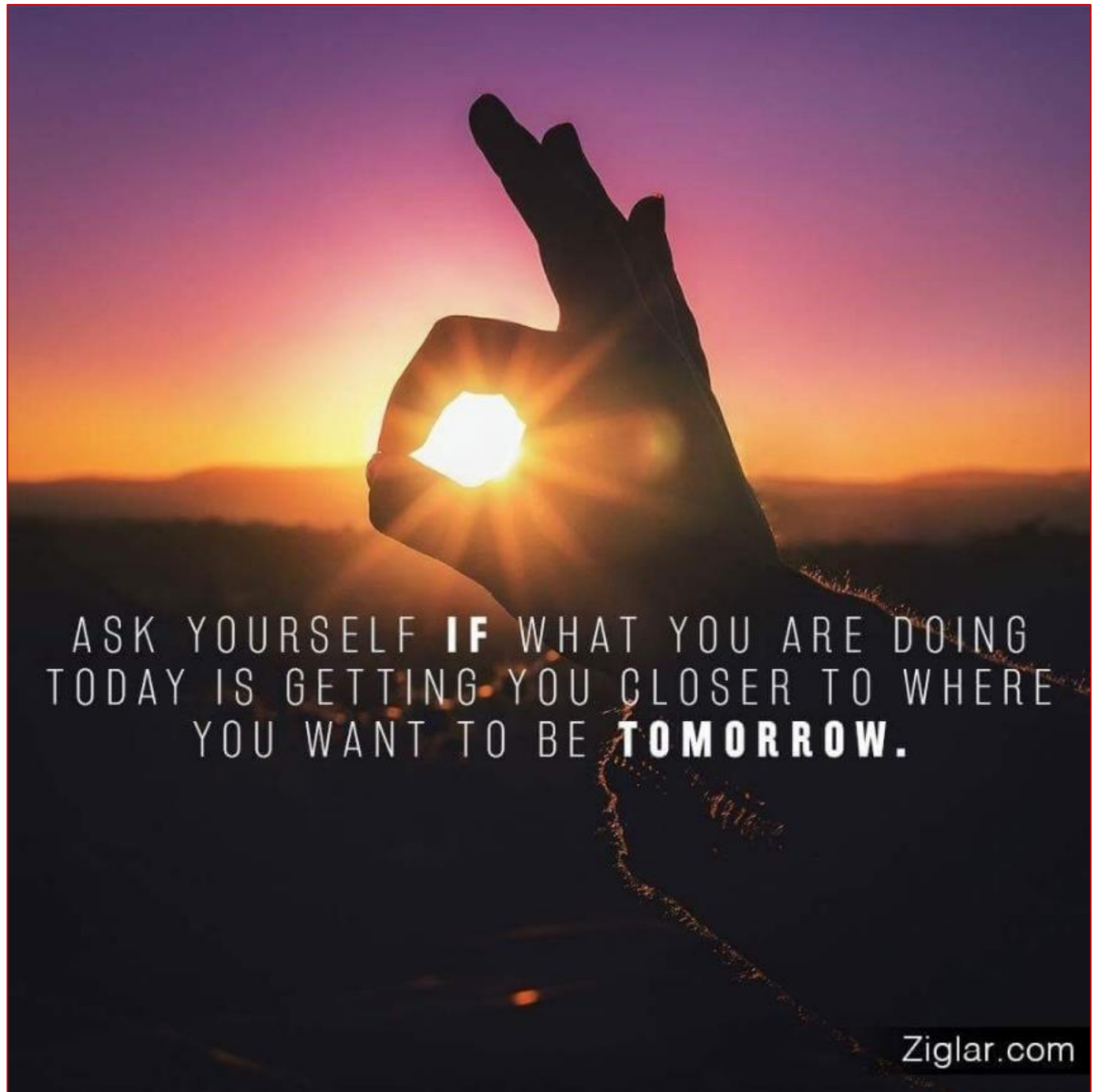
OVER 300 000 GRADUATES
ARE UNEMPLOYED AND
CLOSE TO 200 000 COLLEGE
& UNIVERSITY STUDENTS
SEEK WORKPLACE TRAINING
AS A REQUIREMENT FOR
GRADUATION IN SOUTH
AFRICA.



UNEMPLOYED GRADUATES ROAMING THE STREETS



HOME FOR GRADUATE EMPLOYMENT & INNOVATION



ASK YOURSELF **IF** WHAT YOU ARE DOING
TODAY IS GETTING YOU CLOSER TO WHERE
YOU WANT TO BE **TOMORROW.**

WHO WE ARE & BOARD OF DIRECTORS?



SACGC is a graduates council established in terms of the Co-operative Amendment Act, No 6 of 2013 to grow a high calibre of youth and the advancement of graduate cooperatives as viable economic entities to fast track job creation, foreign direct investment and skills transfer to grow the economy in municipalities and rural areas.

It is a council established to provide skills development innovation, support, monitoring and evaluation as per the dictates of the Skills Development Act 97 of 1998 and in accordance with the mandate of the National Skills Development Strategy and any subsequent post school education and training policies in South Africa.

The SACGC is a member of the Presidential Youth Working Group established by President JG Zuma on June 9, 2015 to advise the President on matters affecting implementation of the youth policy.

Mr Maqubela serves as the Chairperson of the Economic Participation & Transformation Work Stream of the Presidential Youth Working Group. He was also inducted on the World Association of Cooperative Education's Coop Hall of Fame in 2015.



Thamsanqa Maqubela
Executive Chairman



Nomzamo Kunene
Director: Non
Executive



Simphiwe Vulindlu,
Director Projects



Busisiwe Nsutsha,
Director: Non
Executive



Mark Cunningham,
Director: Profiling &
Assessments



Dr Siphokazi Koyana,
Consulting Director:
Research

MISSION

To grow a high calibre of youth and advance graduate cooperatives as viable economic entities to accelerate innovations and industrialization program of South Africa

VISION

Internationally recognized champion for youth economic advancement

VALUES WE LIVE BY

Integrity - High Performance – Collaborative - Stakeholder Priority, Entrepreneurial

SKILLS DEVELOPMENT PARTNERS/FUNDERS



330
INTERNS



400
INTERNS



20 YOUTH
CO-OPS



220
INTERNS



60
CANDIDACY

INTERNSHIP/ WORK INTEGRATED LEARNING/ LEARNERSHIP PILLARS

1. Job assessment & registration fee for every participating intern;
2. **Evidence of Skills Transfer - Skills Transfer Matrix - Supervisor/Interns;**
3. Exit Opportunities Towards Running Own Business/ CO-OPERATIVES or Employment



BARRIERS TO CANDIDACY REGISTRATION

- Lack of awareness by professional bodies and professional councils;
- Inability of the students to secure workplace training;
- Cost of registration;
- Limited progression of BLACK students towards degree completion and higher degrees;
- Lack of willing and available mentors to groom BLACK students;
- Attitude of the students – gearing towards entitlement;
- Universities not proactive and plays minimal role to champion access;
- Lack of appropriate career guidance to schools in townships and rural areas, thus limits awareness of career in the sector;
- Limited BLACK students with good pass in mathematics and science to qualify for the courses in the sector.

BARRIERS TO REGISTRATION AS PROFESSIONALS

- Pre-occupation of companies with profit and not human capital pipeline;
- SETAs activities fragmented and not achieving an integrated funding of professional registration;
- Unemployment of graduates affect progression to professional registration;
- Poor communication and limited awareness by professional councils and professional bodies to attract BLACK entrants;
- No access to significant or catalytic projects by BLACK graduates in the workplace;

PROBABLE SOLUTIONS

- Targeted access to Maths and Science learners at schools level;
- Targeted support/career guidance for Maths and Science learners at schools level;
- Planned access built environment careers/occupations/vocations at university, university of technology and TVET Colleges;
- Deliberate support and career exposure through mentoring and workplace training for BLACK graduates to meet a specified target;
- Free or subsidised access and registration of students in the professional bodies, professional councils and voluntary associations;
- Include a targeted number or per cent of BLACK graduates and assign significant roles in the catalytic projects within the private and public sector;
- Bursaries or NSFAS funding to include candidacy registration as part of the package for students;
- Support for BLACK consulting engineering or built environment companies through set asides to benefit from preferential procurement;
- Targeted mentoring of BLACK students, graduates and candidates to be included in the professional CPD points to increase number and quality of mentorship in the workplace.



**BECOME A PARTNER OR AN AFFILIATE TO GROW THE POOL OF
INFLUENCE IN JOB & WEALTH CREATION BY EMPOWERING THE
YOUTH OF SOUTH AFRICA THROUGH SKILLS TRANSFER AND
ENTREPRENEURSHIP.**

THANK YOU!

Thamsanqa Maqubela
Executive Chairman
chairman@cooperativecouncil.co.za

The Fourth Industrial Revolution – SOUTH AFRICA’S Chance

<https://www.youtube.com/watch?v=6ZOkoRuV1R0>