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Priority Fields of Siudy
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for P051 Apartheid South Africa
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iPaper prepared for
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BACKGROUND

An attempt to determine Priority Fields of Study at the Tertiary Level for Post Apartheid South Africa must be Conducted in the context of the present and past history of an apartheid dominated society. The Commonwealth Expert Group in Beyond Apartheid : Human Resources in a New South Africa (1991 : 7) identified the following critical issues:

a white per capita income of R20, 600 as against a blackper capita income of R2, 919;

an occupational structure charaeterised by gross racial and gender inequalities across the entire spectrum of skills;

an education and training system designed to reinforce and perpetuate these inequalities of skills;

massite unemployment and under-employment among blacks;

a labour market distorted in favour of unproductive occupations with Shonages ofskilled labour appropriately trained for an economy capable of growth;

an administrative and management culture which strongly sustains white domination in both the public and private sectors.

Inequalities dominate South African society. Here are some appalling facts:

alongside 307,000 vacancies in white schools, two million blacks are without school places;

there are 180,000 whites in managerial, technical and professionalpositions, less than 3,000 blacks;

in an economy dominated by the mining industry, there has been one black mine manager in 77 years;

there is not a single black actuary;

less than 2 percent (2%) whites compared with 53 per cent (53%) of blacks live below the poverty line; more than 40,000 teachers will be required to bring black teacher-pupil ratios on par with whites, and R25 billion to place black education on a par with white education

(Apartheid Indg, South African Research and documentation Centre, Harare, 30 April 1991)

It is prudent therefore, to suggest that in order to achieve meaningful human resource development, the educational system must be restructured. Gender and class inequalities must be eradicated.

The purpose of this paper is to identify Priority Fields of Study at Tertiary level for a New

South Africa. For the purpose of this study priority fields of study are those disciplines

where Africans have been denied access through the politics of Bantu Education. These are fields that are technical, scientific and skills oriented. We identify the following as

key areas: _

math

engineering

information technology & library science - archivists

accountancy

banking

mining science

commerce

public administration

law

agriculture

architecture and urban planning

electronics

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health sciences, such as medicine, dentistry, pharmacy, nursing
personnel management

journalism

foreign languages

These disciplines are essential for total participation in the development of a new South
teacher education

Africa. There has to be a deliberate and conscious effort by decision makers in both the
public and private sector to redress the imbalances created by apartheid. To gain a
better understanding of some of these imbalances, statistical tables will be presented to
illustrate participation or lack of, in the priority fields identified in the foregoing.

It is

impossible to capture the disparities in the educational system and the field of work.
under apartheid. However, data presented will attempt to portray the severity of the
crisis. Data presented will also illustrate marginalization of women and rural poor. The
paper also suggests that gender and geography be applied as a criteria for awarding
bursaries.

EDUCATIONAL STATISTICS

TABLE 1 (A) : AFRICAN ENROLMENT IN SELECTED STANDARD 10 SUBJECTS,
1990

Technical

Accountancy

Business Economics

Physical Science

Mathematics

Constructed from data contained in Research Institute for Education Planning, Education a
nd Manwver Develogment, 1990, p.16.

TABLE 1 (B) : COLOURED AND INDIAN ENROLMENT IN SELECTED STANDARD
10 SUBJECTS, 1991

COLOURED

Technical

Physical Science

Mathematics

Commercial

Constructed from data supplied by Department of Education and Culture (House of Represent
atives - 1991) and Department of

Education and Culture (House of Delegates - 1991).

African students were lagging behind in all subjects taken in 1991 as reflected in the da
ta

presented in the preceding.

TABLE 2 : TECHNICAL COLLEGE ENROLMENT BY SUBJECT CATEGORY AND
RACE : 1988

African

Architecture 4

Arts 1

Commerce 2 693

Communication 12

Computer Science 28

Education 0

Engineering 220

Health Science '21

Home Economics 4

Industrial Arts 5 091

Language 7

Law ' 0

Library Science 0

Life Sciences 25

Mathematics 31

Philosophy/theology 0

Physical Education 2

Psychology 0

Public Administration 12

Social Science 73

Total 8 224

Coloured

14

470

155

30

388

42

116

855

47

270

350

2 813

Source : Race Relations Survey 1991/92, p. 216.

Indian

291

54

199

290

407

239

144

153

94

30

2 204

White

1 009

5 290

649

867

89

4 105

22

488

4 546

1 533

254

1 520

2 077

14

210

24

24

380

23 111

TABLE 3 : ENROLMENTS IN UNIVERSITIES BY RACIAL CLASSIFICATION,
GENDER AND FORM OF DEPARTMENTAL CONTROL : 1986

	House of Reps	House of Delegates	House of Assembly
African			
Male			
Female			
Total			
Coloured			
Male			
Female			
Total			
Indian			
Male			
Female			
Total			
White			
Male	88 146	88 570	
Female	60 670	60 879	
Total	148 816	149 449	

Source : South African Institute for Race Relations, 1990

A critical look at Table 3. Enrolments in Universities by racial classification, gender and

form of department control (1986) paints a bleak picture for African students as compared to their white counterparts. The ratios are skewed, considering that Africans are the majority in South Africa.

TABLE 4 : NUMBER OF ENROLMENTS IN SELECTED SUBJECTS AT
UNIVERSITIES BY RACIAL CLASSIFICATION, 1986

Agriculture 204 (12.4) 0 (0.0) 0 (0.0) 1 439 (87.6)
 Architecture 0 (0.0) 0 (0.0) 0 (0.0) 2 072 (100)
 Commerce 3 258 (15.2) 692 (3.2) 1 228 (5.7) 16 256 (75.9)
 Comm 231 (15.7) 26 (1.8) 52 (3.5) 1 162 (79)
 Education 5 485 (34.8) 751 (4.8) 968 (6.2) 8 509 (54.2)
 Eng 3 (0.01) 0 (0.0) 44 (0.9) 4 806 (99)
 Law 1 774 (14.2) 609 (4.9) 642 (5.3) 9 452 (75.6)

Military

Science

Public Admin

& Social

16

Service 717 (22.6) 203 (6.4) 316 (10) 1 929 (61)
 11 672 (18.6) 2 281 (3.6) 3 250 (5.2) 45 641 (72. 6)

Source : South African Institute of Race Relations, 1990

The subjects taken by Africans constitute 18% of the total.

The stats presented in this section illustrate that Black education needs to be overhauled,

and that greater participation should be afforded to Africans in a new South Africa.

OCCUPATIONS

Tables 1(a) and 1(b) showed that fewer African students enrolled in Science, math and technical subjects. Part of the reason for the discrepancy lies in teacher shortages in these subject areas in African schools.

& 'Ehrolment in PSE
Tam, System 199
TECHNIKON 114,071 CIWHITE
.COLOURED
.INDIAN
.AFRICAN
TEACHER COLLEGES 57076
TOTAL 490112
Source: Nico Cloete EPU Wits 1993
l o 510 100 150 200 250 300

Table 6 Q :1
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d(, L?-
African Enrolmeiit at PSE '
1990
1020 WHITE AFRIK.
6290 WHITE ENG.

The Commonwealth Expert Group Beyond Apartheid reports (p. 30)

"There are teacher shortages of between 70% and 90% in these subject areas within African Schools. There is a correlation between lack of exposure to the aforementioned subjects and a shortage of qualified entrants to Science, Technology and Mathematics Education (STME). "

Data available indicates that 60% of employed women in South Africa, are African.

Women employment is concentrated in areas where there are least formal skills, such as service in agriculture. A majority of women are in nursing and teaching.

Studies show that 2,2% of managers and less than 1% senior managers in South Africa - are African (UNISA, 1990). The first African woman advocate was admitted to the bar in 1991 and that the first African woman conveyancer qualified in 1991. The number of African chartered accountants only increased from 29 to 42 in 1991 (Race Relations 1991/92, p. 241).

Tame 7 Occupational Distribution
by Race 1989
PROFESSIONAL -
MANAGERIAL&EXECUTIVE
CLERICAL
EJWHITES
.BLACKS
PRODUCTION WORKERS .
UNSKILLED WORKERS
O 20 40 60 80 100 120
PERCENTAGE

AfricansinOccupational
Tables Structure 1987
athurses 60
Accountants 7
Lawyers 6
M05, 4
Engineers .1
Scientists 5.5
echnicians 18
D octors 8
h Architects/Surveyors 3
Educationists 63

Table 9
Occupational Structure
(selected occupations) 1985
IIJWHITE
.COLOURED
.INDIAN
IAFRICAN
LABOURERS g'
TRANSPORng I
o 20 4o 60 80 100 120
Source! Levy and Mbali 1987

TABLE 10 : SELECTED PROFESSIONS BY RACE
Current Distribution Racially Proportionate
Distribution

(14% whites, 86% blacks)

M

Occupational Category Total No. whites (%) Black: (%) White: Black:

Electrical and Related

Electrical 1 676 1 649 (98%) 27 (2%) 235 1 441

Civil and Related 4 798 4 735 (99%) 63 (1%) 672 4 126

Technical Inspector and

Related Occupations

Inspector, Products,

machinery, etc. 5 627 3 692 (66%) 1 935 (34%) 788 4 839

Architect 2 526 2 494 (99%) 32 (1%) 354 3 172

Physical Scientist and

Related Occupations

Biophysicist 2 2 (100%) - - -

Agri, Forestry and

Food Science

Agricultural Ext. Officer 6 2 989 2 101 (70%) 888 (30%) 418 2 571

Medical, Dental and Health Related

General Medical Practitioner 13 027 10 730 (82%) 2 297 (18%) 1 824 11 203

Dentist 3 002 2 793 (93%) 209 (7%) 420 2 582

Education and Related

Principal 22 333 3 426 (15%) 18 907 (85%) 3 127 19 206

Teaching

Secondary 79 555 33 010 (41%) 46 645 (50%) 11 152 68 503

Primary 132 699 30 482 (23%) 102 217 (77%) 18 578 114 121

Legal

Judge/Magistrate 1 177 992 (84%) 185 (16%) 165 1 012

Personnel and Management Service

Manpower Planner 310 280 30 (10%) 43 267

Accounting Related

Pub. Accountant 7 391 6 761 (91%) 630 (95%) 1 035 6 356

Journalism

Radio/ TV Journalist 2 844 2 433 (86%) 411 (14%) 2 446 2 446

Executive of: Administrative

Ambassador

Commissioner General 11 11 (100%) 0 2 9

Town Clerk, Treasurer 741 723 (98%) 18 (2%) 104 637

Top Executive of Company,

Public, Public Corporation

Chief Executive and

General Manager 23 817 22 645 (95%) 1 172 (5%) 3 334 20 483

Defence 74 932 34 014 (46%) 40 918 (55%) 10 490 64 442

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'Now : These hypothetical figures show, for the purpose of illustration only, what the occupational distribution would be if it was in exact proportion to population distribution by race.

Source : Manpower Survey, 1989, Occupational Information, Central Statistical Services.

PUBLI C ADMINISTRATION

The civil service, under apartheid, was dominated by white males. Priority areas of study should include:

public administration including central services such as economic and fiscal management, legal and judicial services, the police, army and security services and positions in technical services such as educational staf and management, diplomatic stew; transport and communication 0177012113 and social development sector. Beyond Apartheid (p. 50).

TABLE 11 : CENTRAL GOVERNMENT AND PROVINCES : 1990

DEPUTY DIRECTOR AND LOWER (R29,000 - R74,000)

Department White Coloured Indian African Total

H

Justice 3 075 80 22 112

Education/Training 2 627 0 0 2 459

SAP 5 963 87 111 345

SADF 7 743 179 3 89

Cape Province 5 087 563 82 248

Natal 1 973 78 687 368

OFS 1 544 20 0 151

' TV! 6 57.5 41 201 501

Delegates 128 1 5 163 0

Reps 1 214 1 525 71 2

Assembly 31 670 4 5 2

All others 9 744 S9 51 50 _

M

Total 67 548 2 624 6 396 4 330 80 804

(80%) (8.9%) (6.6%) (45%)

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TABLE 12 : SOUTH AFRICAN PUBLIC SERVICE RACIAL BREAKDOWN OF 5 TOP
INCOME CATEGORIES (R75,000-f- : DIRECTOR-i-) IN CENTRAL STATE
DEPARTMENT S AND PROVINCES, 1990

M

thze Coloured Indian African Total

M

Admin : Delegate 9 0 8 0
Admin : Reprtsctativcs 21 8 1 0
Admin : Assembly 138 0 1 0
Internal Affaixs 27 0 0 0
Foreign Affairs 71 0 0 0
Finance 58 0 0 0
Trade & Industry 29 0 0 0
Justice 559 1 0 0
Agriculture 30 0 0 0
. Manpower 36 0 0 0
Mineral &_Encrgy 38 0 0 0
Health 1 59 0 0 0
Nat. Education 16 0 0 0
Environment 31 0 1 0
Education & Training 32 0 0 1
Development Planning 39 0 0 0
Development Aid 51 0 0 0
Public Works 41 0 0 0
Transport 23 0 0 0
Water Affairs 30 0 0 0
Comm. for Admin. 32 0 0 0
Auditor-Gencral 22 0 0 0
State President 11 0 0 0
SAP 145 0 0 0
SADF 274 0 0 0
Cape Province 338 11 7 0
Natal 114 1 40 3
OFS 111 0 0 0
'I'PA 386 2 2 10
Euro for Information 16 0 0 0
i3
2 787 61 14 2 885
. (96.6%) (3%) (2.1%) (05%)

W

Source : Hansard, 14 March 1990, C015 483 - 491

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The statistics presented indicate that for Afn'cans to participate fully in a democratic society, training aimed at redressing past discrimination should be a national priority. It is fitting to suggest that en Educational Marshall Plan should be implemented as a matter of necessity.

The South African Council of Churches cannot be expected to assist every student that applies for assistance. The SACC, can however, assist applicants by suggesting to them what priority fields they wish to enter and which simply means that the student wishes to become a teacher. Proper counselling is often lacking. Students who enrol in Biblical Studies can be persuaded to switch to Public Administration. Students may not be aware of the importance of this field of study. Black enrolment in the few priority areas should become the norm rather than areas "where angels fear to tread". According to Race Relations (1989/90) there are 300,000 Black school leavers joining the job market each year, and that the highest concentration is in urban areas. Unemployment is higher among Blacks as compared to Whites and therefore crime and other undesirable behaviour will become inevitable. A New South Africa will be a nightmare for the majority of Africans. The SACC should continue to play a role in awarding bursaries. We are aware that the organization has limited funds. Recipients of scholarships should be encouraged to pay back the grants in the form of services or donations after graduation. A culture of giving should be developed through the creation of such organization as SACC Bursary Alumni.