

# Apprentice training and artisan employment: *changing numbers – but maintaining 'job reservation'*

## Some definitions

We have used the following definitions in order to make some sense of the confusing terms which are normally used:

- The broadest category is that of *occupational group* which refers to broad groups – such as artisans, apprentices, labourers, managers etc.
- Within each occupational group there are *occupational sectors* – such as Metal and Engineering Trades, Building Trades, Motor Trades etc.
- Within each occupational sector there are *job categories* – for example, in Metal and Engineering there are welders, boilermakers etc. ♦

Looking closely at the official statistics, PAUL LUNDALL\* and ZAID KIMMIE\*\* show the continuing impact of inferior education and racially-biased training opportunities for blacks.

The challenges involved in planning a broad strategy of economic restructuring for South Africa must include the need for industrial training for the workforce of tomorrow. But the economic strategy adopted will have to balance the increasingly serious unemployment levels for the great mass of the unskilled workers of South Africa, with the pressing need for skilled labour. Without a well trained and skilled workforce, the required increase in productivity, and growth in the economy, will be unobtainable.

Currently, only 10% of South Africa's workforce is

being trained in technical fields, while it is estimated that 75% should be trained in these fields to meet economic requirements.\*\*\*

As late as 1983, just over 1% of the total economically active population in South Africa were registered for apprenticeship. This compares very unfavourably with other countries where, like South Africa, apprenticeship is considered the main route to training of skilled artisans. In 1977, Germany had 5,70%, Austria 6,15% and Switzerland 5,38% of their respective total economically active populations in the apprenticeship system.\*\*\*\*

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\*\* At SALDRU at the time of writing this article

\*\*\* South African Institute of Race Relations, Annual Review 1988/89, p411

\*\*\*\* Investigation into the Training of Artisans in the RSA, 1985, p 49

**TABLE 1 Distribution of Artisans and Apprentices by Occupational Sector 1989**

Occupational Sector	Artisans	Apprentices
Metal & Engineering	33%	40%
Electrical	16%	25%
Motor	15%	18%
Building	19%	12%
Printing	6%	3%
Furniture	3%	1%
Other	8%	1%
Total	100%	100%

Artisan employment and apprenticeship in South Africa are heavily focused on four occupational sectors – Metal and Engineering Trades, Electrical Trades, Motor Trades and Building Trades – which together account for approximately 90% of all apprentices and almost 85% of all artisans [see Table 1].\* This is not surprising, since the trades in these occupations provide the bulk of the skilled labour force in the more important manufacturing industries, as well as in mining.

**The statistics of racial discrimination**

During the 1970s, Africans accounted for less than 2% of all apprentices and artisans. Although they are the overwhelming majority of the South African population, there were on average, during the 1970s, only 560 African apprentices and 4 600 African artisans in employment each

year. By contrast, there were 37 600 white apprentices and 174 000 white artisans in the same period [see Tables 2 and 3 on p 42].

The apprenticeship system was dominated by white apprentices, who accounted for more than 80% of all apprentices, and to a lesser extent by coloured apprentices, who accounted for about 15% of apprentices. A similar situation existed for artisans, where approximately 78% were white and 17% coloured.

There were also major imbalances in the distribution of apprentices across occupational sectors. The much greater number of white apprentices and artisans was reflected also in their domination of the four most important occupational sectors: Metal and Engineering, Motor Trades and Electrical Trades.

In only two occupational sectors did black apprentices form the majority, namely Building (about 58%) and Furniture (about 85%). Similarly, black artisans represented the majority only in the Furniture occupational sector.

Black apprentices and artisans were grossly under-represented in the Metal and Engineering, Motor and Electrical occupational sectors. General training opportunities for black apprentices were

**Sexual, as well as racial discrimination!**

Women have largely been excluded from the apprenticeship training process and this has added yet another dimension to the skills shortage in South Africa.

Between 1975 and 1987, the number of female apprentices in South Africa remained relatively constant – at about 2 000 per annum! – comprising between 3% and 5% of total apprentices.

In addition to the miserable number of female apprentices, persistent racial and sexual discrimination has resulted in

- 75% of current female apprentices being white; and
- 80% of all female apprentices being trained as hairdressers.

Similarly, the denial of training opportunities to female apprentices has systematically shaped the structure of female artisans in employment:

- almost 85% are white; and
- more than 70% are employed as hairdressers. ♦

\* The statistics in this article are derived from the Manpower Surveys which were previously published every second year by the Department of Manpower but since 1987 have been produced annually by the Central Statistical Service

**TABLE 2 Distribution of Apprentices by Occupational Sector 1969-1979**

Occupational sector	Coloured	African	Asian	White
Building	55%	35%	45%	9%
Metal & Engineering	11%	7%	13%	40%
Furniture	11%	( )	( )	( )
Motor	9%	28%	10%	20%
Electrical	( )	14%	17%	18%
Other	14%	16%	15%	13%
Total	100%	100%	100%	100%
Average per annum	6 700	560	1 380	37 600

**TABLE 3 Distribution of Artisans by Occupational Sector 1969-1979**

Occupational Sector	Coloured	African	Asian	White
Building	63%	44%	48%	20%
Metal & Engineering	12%	11%	11%	42%
Furniture	10%	10%	11%	( )
Motor	5%	15%	14%	14%
Other	10%	20%	16%	24%
Total	100%	100%	100%	100%
Average per annum	38 000	4 600	7 000	174

**TABLE 4 Distribution of Artisans and Apprentices by Population Group 1981 - 1989**

	Coloured	African	Asian	White
Artisans	17.5%	5.8%	4.1%	72.6%
Apprentices	13.5%	13.8%	4.1%	68.6%

severely limited. They were channelled towards the Building occupational sector because it is subject to severe cyclical fluctuations, and it provides little room for career advancement or long term security.

Barriers which excluded black apprentices from the more technologically advanced trades included inferior education and racially exclusive craft unions.

**Changes and continuities**

From 1980/81, after the relaxation of legal restrictions in the Manpower Training Act on apprentice training, there was a significant increase in the number of African apprentices. During the 1980s, approximately 7 200 African apprentices were registered per year, an increase of almost thirteen times the average during the 1970s. The number of

coloured and Asian apprentices remained relatively constant, at about 7 100 and 2 070 per year respectively. The number of white apprentices fell from 43 000 in 1985 to 31 000 in 1988, making an average of 36 000 white apprentices per annum.

A similar change was occurring with regard to artisan employment, but at a slower rate. The average number of artisans per year increased from 223 400 to 234 000 overall. The average number of white artisans per annum declined from 174 000 in the 1970s to 170 000 in the 1980s. The average number of African artisans increased from 4 600 to 13 500 per annum.

However, closer examination of the statistics [see Table 4 left] shows, that white apprentices still made up over 72% of all apprentices, and more than 68% of all artisans.

What is more, the increase in the number of African apprentices took a very specific form. In fact, a large proportion of the growth was actually absorbed by one occupational sector: Building [see Table 5 on p 43]. Furniture was the other sector where blacks continued to make up a majority of all apprentices.

Little real increase occurred in the more important occupational sectors such as Metal and Engineering, Electrical Trades and Motor Trades. In fact, apprenticeship in these and all the other sectors

continued to be dominated by whites, and these patterns were reproduced in the structure of artisan employment during most of the 1980s [see Table 6 right].

**Artisans and apprentices in the metal industry**

Doug Hindson and Owen Crankshaw noted in "New jobs, new skills, new divisions - the changing structure of SA's workforce"\* that within the metal industry, artisan employment grew relatively slowly.

However, by not adequately analysing the racial structure of this important occupational sector, Hindson and Crankshaw missed a very significant feature evident within the figures.

Most artisan employment in the metal and engineering trades is concentrated in a limited number of job categories. Table 7 (on page 44) lists 9 out of 27 job categories which can be found in the industry.

Our investigation of the artisan occupational sector within the metal industry shows that white artisans are spread over a wider range of job categories than black artisans. The same is true for apprentices.

Furthermore, jobs such as tool-making, jig-making, die-making, mill-wrighting and pattern-making, which require a more thorough

**TABLE 5 Distribution of Apprentices by Occupational Sector 1981-1989**

Occupational sector	Coloured	African	Asian	White
Building	35%	40%	14%	5%
Metal & Engineering	26%	24%	31%	42%
Motor	12%	17%	22%	20%
Electrical	12%	12%	21%	26%
Other	15%	7%	12%	7%
Total	100%	100%	100%	100%
Average per annum	7 100	7 200	2 070	36 000

**TABLE 6 Distribution of Artisans by Occupational Sector 1981-1987**

Occupational sector	Coloured	African	Asian	White
Building	56%	42%	35%	12%
Metal & Engineering	17%	21%	18%	43%
Motor	7%	11%	16%	16%
Electrical	5%	9%	9%	12%
Other	15%	17%	22%	17%
Total	100%	100%	100%	100%
Average per annum	41 000	13 500	9 600	170 000

training and greater level of skills than boiler-making or fitting and turning, still remain almost exclusively dominated by white artisans and apprentices.

It appears that black artisan employment and apprenticeship training is heavily concentrated in occupations where operating skills and knowledge are acquired more quickly - such as boilermaking, fitting-and-turning and welding.

Table 7 shows the distribution of the different 'races' in artisan job

categories in the metal and engineering trades in 1987. While there is a large number of whites in the more skilled fitter-and-turner category, they are also spread over all the job categories.

Black artisans are very differently distributed. They are located in a much more limited number of job categories:

- **Coloureds artisans** - 83% are employed in only five job categories. The majority work as welders (31%), boilermakers (27%) and fitter and turners (13%).

\* SA Labour Bulletin, Vol 15, No 1, June 1990

**FEATURE**

**TABLE 7 Distribution of artisans according to occupation in the metal and engineering trades in 1987**

Occupational types	White	Coloured	Asian	African
Welder	7%	31%	8%	29%
Plater (Boilermaker)	14%	27%	11%	13%
Construction Steelworker	32%		16%	5%
Fitter and Turner	16%	13%	15%	8%
Fitter (including machining)	16%	7%	8%	9%
Instrument Maker and Repairer	4%		12%	
Sheet Metalworker	2%	6%	15%	8%
Turner (including machining)	7%			
Toolmaker**	5%			
Other	13%	16%	15%	28%
TOTAL	100%	100%	100%	100%
Total no. of Artisans	67 367	6 418	2 079	4 460

\* includes Architectural Metalworker

\*\* includes Tool & Jigmaker, Machine & Tool Setter.

**Table 8 Distribution of apprentices in training in 1987 according to occupation**

Occupational Types	White	Coloured	Asian	African
Fitter and Turner	32%	25%	27%	28%
Plater (Boilermaker)	12%	25%	20%	22%
Fitter (including machining)	10%	18%	25%	29%
Welder	5%	9%	7%	6%
Instrument Maker and Repairer	4%		8%	
Toolmaker*	6%	11%		
Millwright (Electro Mechanical)	10%			
Aircraft Maintenance Mechanic	5%			
Other	16%	12%	13%	15%
TOTAL	100%	100%	100%	100%
Total no. of Apprentices	12 426	858	411	1 771

\* includes Tool & Jigmaker, Machine & Tool Setter

● **Asians artisans** – 90% are employed in eight job categories. A higher proportion than other black artisans hold more skilled positions but they are still mainly employed as

construction steel/architectural metalworkers (16%), fitter and turners (15%), sheet metalworkers (15%), instrument maker and repairers/mechanics (12%)

and boilermakers (11%).  
● **African artisans** – 72% are in only six job categories. The majority of African artisans are employed as welders (29%), boilermakers



*Why are there not more black artisans?*

*Photo: William Matlala*

(13%), fitters (9%), fitter-and-turners (8%) and sheet metalworkers (8%).

This distorted racial distribution among artisans is strongly carried over onto apprenticeship training, as Table 8 above clearly shows.

The majority of white apprentices in 1987 were being trained over the whole spread of occupations covering the entire range of job categories.

It was the opposite for black apprentices. They were confined within particular job categories. For instance:

- The majority of coloured apprentices were being trained as boilermakers (25%), fitter and turners (25%), fitters (18%) and as toolmakers, tool and

jigmakers and toolsetters (11%).

- The majority of Asian apprentices were being trained as fitter and turners (27%), fitters (25%) and boilermakers (20%).
- The majority of African apprentices were being trained in only three job categories. These were: fitting (29%), fitting and turning (28%), boilermaking (22%).

### Conclusions

What we have attempted to show is that while the 'racial composition' of artisanal and apprenticeship employment is changing, breaking down the available statistics reveals that this has been a very uneven process.

The mere removal of discriminatory legislation allows for a certain growth in the number of African apprentices and artisans, but has not fundamentally challenged the limited access which black, and particularly African, workers have to the more skilled occupational sectors.

- While further investigation is needed into this phenomenon, it is clear that there has been a tendency for the Building occupational sector to become a 'black' area of specialisation. At the same time, the dominant position of whites within most other sectors has remained relatively unchallenged.

● Even where there has been a movement of black artisans and apprentices into a more skilled occupational sector this is again an uneven process. The limited number of black artisans and apprentices in the more technologically advanced Metal and Engineering occupational sector shows that blacks are facing a clear bias in their placement in particular job categories – in fact those of lower skill levels.

From a policy perspective, details such as these are important because it is the intricacies and focus of the current apprenticeship training system which will determine the future growth pattern of black, and particularly African, apprentices and artisans.

It is clear that the potential for addressing the skills shortage in the South African economy does exist amongst the under-utilised and under-trained black workforce. Serious initiatives will have to be pursued to increase the level of technical skills generally, and also to correct the current racial imbalances within skilled occupational groups.

It is imperative that, while recognising that shortages exist in each occupational sector, methods must be found by which to combat these new forms of 'job reservation'. ☆

# COSATU unions take initiatives in training

Education and training must move from "traditional" approaches, benefitting a few, to "transformational" approaches empowering the majority of working people. NUMSA's ADRIENNE BIRD describes how COSATU is contributing towards developing a comprehensive integrated education and training system for the future.

**C**OSATU believes that a massive increase in both the quality and quantity of skills training is needed in South Africa as a necessary complement to the provision of general education to both school-goers and adults. Skills training, the federation believes, is also a fundamentally important part of a larger political and economic programme because:

- those with high level skills tend to wield greater influence in society - both on the political as well as on the economic terrain;
- skills training has an important part to play in ending labour market segmentation and in ending discrimination based on race, gender and class;
- without more and better

skills, various opportunities for growth will not be born;

- the development of skills has redistributive effects as higher skills, especially in areas where shortages have been identified, brings access to higher income.

COSATU accepts, however, that skills training can be approached either in:

- a traditional way (that is, benefitting the few, which leaves structural inequality unchallenged); or
- a transformative way (that is, benefitting the majority, and changing power in favour of working people.

This article explores some fundamental principles guiding COSATU's interventions in this arena of struggle and gives an assessment of progress thus far.

In 1981, the Manpower