

TECHNICAL AND VOCATIONAL EDUCATION

AFRICANS

TRADE SCHOOLS

Trade schools are all situated in the homelands. In 1973 there were eleven trade schools and six trade sections attached to other schools in the Republic (a new school was opened at Zwelitsha early in the year). In South West Africa there were five schools with trade sections.

In an address to the National Development Foundation on 2 August¹ the Deputy Minister of Bantu Administration and Education, Mr. T. N. H. Janson, said that fourteen types of courses were available in the Republic and six in South West Africa. For electricians and wiremen the course took 3 or 5 years after J.C. (i.e. 3 years' full time or 5 years on block training in-service system). For motor mechanics and watch-makers the course took 3 years after J.C. The duration of other courses was 2 years after Std. VI. Enrolment figures were:²

	<i>Republic and Transkei</i>	<i>South West Africa</i>
1st year ...	1 608	198
2nd year ...	1 139	70
3rd year ...	324	8
4th year ...	29	—
5th year ...	19	—
	3 119	276

The numbers of successful candidates in the Republic and South West Africa in examinations at the end of 1972 were:³

Concreting, bricklaying, plastering	206
Carpentry, joinery, cabinet making	189
Plumbing, drainlaying, sheet metal work	107
General and motor mechanics	83
Tailoring	52
Panel beating and motor upholstery	38
Leatherwork and upholstery	34
General mechanics	27
Electricians and wiremen	15
Painting and glazing	9

¹ State Information Office Press Release.

² 1973 statistics except for three schools. The Dube Vocational Training School (described later) is included.

³ *Bantu Education Journal*, April, and Minister of Bantu Education, 13 April, Assembly Hansard 10 cols. 665-6.

Watchmakers	...	...	...	...	...	...	...	...	9
Brickmaking	...	...	...	...	...	...	...	...	5
Trade instructors	...	...	...	...	...	...	...	...	6
Radiotricians	...	...	...	...	...	...	...	...	No candidates as yet.

On successful completion of their courses the youths receive a Certificate in Vocational Training. In most cases their theoretical training has been inadequate to enable them while at school to enter for National Technical Certificate (N.T.C.) examinations, and they need in-service training before they enter for trade tests. At the Dube Vocational Training Centre, however, the standard is such that boys can take these tests before leaving the centre. (This centre, formerly run by the Johannesburg municipality, now falls under the West Rand Bantu Administration Board.) In 1973, 58 of its students passed building trade tests conducted by the Department of Labour. Besides this, 67 of the boys wrote examinations at the N.T.C. I level, and 69 at the N.T.C. II level.

In his address on 2 August, quoted earlier, the Deputy Minister said that trade courses were given in prisons to those with sentences of two years or longer, the training being graded according to the prisoners' educational status. On release, the men were placed in employment.

An apprenticeship scheme devised specifically for Africans had been approved in principle, Mr. Janson continued, and would be implemented when the various homeland governments passed the necessary legislation.

Trade testing of African building workers has, in the past, been carried out by the Department of Labour. Testing in other courses, and N.T.C. examinations, have been conducted (for trainees of all racial groups) at a centre at Olifantsfontein run by the Department of National Education. The Deputy Minister said that the Department of Bantu Education was taking over such testing, beginning with the building trades. Since the beginning of 1972 tests had been conducted at Boitseanape near Mafeking in BophuthaTswana, Umlazi (KwaZulu), and Polokwane at Seshego (Lebowa), also at a number of prison centres. During 1972, 232 prisoners and 299 students at trade schools passed such tests. Nine of them achieved full artisan status. The department was planning at least one testing centre per homeland. New ones were to be established shortly at Giyani (Gazankulu), Finyazwanda (Venda), and Babelegi (BophuthaTswana).

The Bantu Investment Corporation stated in its report for 1971-2 that it had established a centre at Temba (to the north of Pretoria) where courses for commercial drivers and supervisors were conducted.

Trade instructors for African schools are trained at Boitseanape. It is, apparently, a two-year course. The Minister

said on 13 April⁴ that 15 men were taking this course, and that 6 qualified at the end of 1972.

TECHNICAL SECONDARY SCHOOLS

There are five technical secondary schools, at Mamelodi (Pretoria), Jabulani (Johannesburg), Edendale (near Pietermaritzburg), Umlazi (Durban), and Kwazakele (Port Elizabeth), to which boys who have obtained a first- or second-class Standard VI pass may be admitted for a three-year course leading to a Junior Certificate (technical) examination. All study three languages, arithmetic or mathematics, physical science, and, in the first year, social studies. During the second year they add workshop calculations and a technical subject. A Senior Certificate (technical) course was recently introduced.

There are ten technical subjects available, including building construction, workshop drawing, woodworking, plumbing and sheet metal work, or courses for electricians or motor mechanics.

Enrolment figures at these schools in 1973, as given by the Deputy Minister in the address quoted above, were:

Form I	...	134
Form II	...	108
Form III	...	107
Form IV	...	86
Form V	...	20
		455

In reply to a question in the Assembly on 13 April,⁵ the Minister said that 74 boys passed the Technical J.C. at the end of 1972, and 2 the Technical Senior Certificate.

Boys with the Technical Junior Certificate need at least a further year's training at a trade school before they are able to take trade tests. The object of the course is not really to train tradesmen, however, but to train youths who will afterwards be able to set up businesses as, for example, building contractors. Those who wish to do so can proceed to take one of the more advanced courses, described later.

TECHNICAL COLLEGES

The Transkeian Government runs a technical college at Umtata, offering part-time classes for electricians and motor mechanics, and in woodworking, welding, and panel-beating, leading to the National Technical Certificates I, II, and III. Besides this, practical in-service courses of ten weeks' duration are held in bricklaying, plastering, welding, and other trades.

⁴ Assembly Hansard 10 col. 672.

⁵ Hansard 10 cols. 670-1.

Two technical colleges have been established by the Department of Bantu Education, at Edendale near Pietermaritzburg and Mmadikoti near Pietersburg. The Deputy Minister stated that the courses available (not all were provided at both colleges) were:

Engineering technicians and survey technicians — 4 years after S.C.

Geology technicians — 3 years after S.C.

Health inspectors — 2 years after S.C.

Medical laboratory technologists — 1 year after S.C.

Public health nurses — 1 year for qualified nurses.

Health assistants and water and sewage purification operators — 1 year after J.C.

The enrolment in the Republic and Transkei in 1973 was:

	Year of study				Total enrolment
	1	2	3	4	
Engineering technicians	21	10	12	15	58
Survey technicians	11	7	11	7	36
Geology technicians	13	8	—	—	21
Health inspectors	27	26	—	—	53
Medical lab. technicians	23	—	—	—	23
Public health nurses	24	—	—	—	24
Health assistants	34	—	—	—	34
Water and sewage purification operators	20	—	—	—	20

As most of these courses are of very recent introduction, few students have as yet qualified. Thirteen passed the course for engineering technicians at the end of 1972. (Results achieved by health personnel and nurses are given later.)

Most of the students enter the service of the Department of Bantu Administration and Development or of a homeland government when they commence the courses, and are paid salaries covering all expenses.

OTHER COURSES

In the Assembly on 16 February⁶ the Minister of Bantu Education said that 7 students were training as land surveyors (at the University of Fort Hare) and 2 as mechanical engineers (presumably at the University of the Witwatersrand).

Courses of training for agricultural extension officers were described in previous issues of this *Survey*.⁷

VOCATIONAL TRAINING FOR GIRLS

The entrance qualification for the courses listed below is Std. VI. According to the Deputy Minister and to information given by the Minister,⁸ these courses are:

⁶ Hansard 2 cols. 119-20.

⁷ Also see *The African Homelands of South Africa*, published S.A.J.R.R., page 83.

⁸ Assembly 13 April, Hansard 10 col. 671.

Course	No. of schools	Length of course	Enrolment, 1973	Passes during 1972
Assistants for pre-school institutions	3	2 years	55	43
Home management	3	1 year	51	25
Dressmaking	11	2 years	338	95
Dressmaking	7	3 months	280	178
Spinning and weaving	2	3 years	78	?
Seamstresses and clothing alterations	1	2 years	11	new course

AD HOC INDUSTRIAL SCHOOLS

Ad hoc industrial schools provide pre-service training for factory operatives in border industrial areas. The Deputy Minister said that there were 15 of these (6 in Natal, 7 in Eastern Cape, 2 in Transvaal). The industrialists provide the accommodation, equipment, and instructors, but the Department subsidizes the salaries of the training staff.

The first of these was opened in 1964 at Mdantsane near East London, to give initial training to textile workers (weavers, spinners, and winders). Further courses were planned for 1973 but the response was poor. Schools opened subsequently provide pre-service training for operatives in factories producing such items as stockings, clothing, cosmetics, batteries, paper, floor tiles, electric cables, and sweets.⁹

PRE-SERVICE TRAINING IN THE HOMELANDS

In the address quoted earlier, the Deputy Minister said that industrial schools had been opened at Babelegi (to the north of Pretoria) and Isithebe (KwaZulu) to provide crash courses, lasting about ten weeks, for workers to be employed by industrialists in the homelands. Training was given in certain basic skills such as welding, carpentry and joinery, sheet metal work, bricklaying, and stone masonry. A certificate was issued to those who passed a test at the end of the course.

TRAINING OF INDUSTRIAL WORKERS FOR EMPLOYMENT IN WHITE AREAS

A further development was announced in the Budget Speech during March. The Minister of Finance indicated that an inter-departmental committee had been set up to investigate the desirability and practical feasibility of establishing systems of pre-service and of in-service training for African workers for industrial work in white areas.

The chairman of this committee is Dr. H. J. van Zyl, the Secretary for Bantu Education. He told the Press¹⁰ that it was composed of representatives of the Departments of Bantu Educa-

⁹ Minister of Bantu Education, Assembly Hansard 7 of 1972, cols. 578-9.

¹⁰ *Star*, 31 March.

tion, Bantu Administration and Development, Labour, and Economic Affairs, and of the Bantu Investment Corporation. It had already held discussions with leaders of industry and commerce on training schemes within the framework of government policy for Africans in white areas.

In the Assembly on 24 April,¹¹ the Deputy Minister of Bantu Development said that the intention was to provide training in the categories of industrial work which, by law, Africans were permitted to carry out in white areas, i.e. jobs on semi-skilled and operative levels.

According to various statements by Dr. Van Zyl and by the Minister,¹² two types of training are to be provided. Firstly, the Bantu Education Department plans to establish eight industrial training centres in African residential areas such as Soweto, at a capital cost of about R2 000 000. Std. V and Form I pupils will attend one of these centres, wherever possible, to study a basic trade, for at least an hour a week, as part of the school curriculum. Basic training will be available in such subjects as woodwork, metalwork, welding, plastics, mechanical practice, building practice, electrical practice, punching computer cards, and "any other directions which are later found necessary".

At the beginning of their Form II year, pupils may elect to follow a practical J.C. course. Those doing so will choose one or two of these practical subjects to study together with academic subjects, attending the industrial training centre for about four hours per subject per week. Adult factory workers will be offered after-hours training at the centres, especially in vocational orientation, languages, and arithmetic. After the Department has provided this basic training, it will be the task of industrialists to give further in-service training.

Secondly, the Bantu Education Department will establish industrial training centres in white industrial complexes to serve industrialists with common training needs. Eight centres are planned initially, at a cost of R1 200 000. Either the local authorities or the industrialists will be expected to make the sites available and to undertake responsibility for running costs. The centres will provide basic scholastic training together with courses in subjects such as motor and machine maintenance and service, fork-lift operation, machine dismantling, sewing machine operation, basic mechanical practice, woodwork and machining, finishing, spraypainting and polishing, basic electrical work, laboratory practice, and punchcard and computer operation.

Apart from the establishment of the centres, the Government will allow tax concessions for approved training centres, and it will set up a standing committee (including representatives of

¹¹ Hansard 11 col. 685.

¹² *Rand Daily Mail*, 5 and 21 June, 24 October; *Star*, 24 October.

organised industry) which will be responsible for implementing the scheme and for liaison and co-operation.

The Minister said that priority had been given to the needs of manufacturing industry, but attention would also have to be given to the needs of commerce, agriculture, service industries, building, and mining, as soon as circumstances permitted.

COLOURED STUDENTS

APPRENTICES

In reply to a series of questions in the Assembly on 7 June,¹ the Minister of Coloured Relations said that 360 apprentices were attending classes at the Peninsula Technical College, and 2 661 were enrolled in departmental or continuation classes at other centres.² As from the beginning of 1971 these lads have written the National Technical Certificate (N.T.C.) examinations of the Department of National Education. The Minister said that the numbers passing such examinations in 1972 were:

N.T.C. I—739.

N.T.C. II—631.

N.T.C. III—182.

PENINSULA COLLEGE FOR ADVANCED TECHNICAL EDUCATION

Altogether, there were 151 full-time and 772 part-time students attending the Peninsula Technical College in 1972 (including the apprentices), the Minister stated. Other courses passed by students during the year were:

N.T.C. Parts I to III — 186 (students not apprenticed).

N.T.C. Parts IV to V — 14.

N.T.C. in Hairdressing — 14.

Certificate for building foremen — 6.

Diploma in Public Administration (1st year) — 3.

Diploma in State Accounts and Finance (1st year) — 1.

Diploma in Accounts and Auditing — 1.

Diploma for Health Inspectors — 8.

Diploma in Public Health Nursing — 14.

Teachers' Diploma, technical — 6.

Teachers' Diploma, commerce — 14.

Dyeing and finishing — 3 (*Alpha* report, February).

Two new hostels are being built at the College, to accommodate about 50 girls and 150 boys.³

TRAINING OF MOTOR MECHANICS

The Minister of Coloured Relations announced in the Assembly on 30 May⁴ that, because of the critical shortage of trained artisans in the motor industry, a course of training for

¹ Hansard 17 cols. 977-8.

² The location of these centres was given on page 378 of last year's *Survey*.

³ *Star*, 13 October.

⁴ Hansard 16 cols. 7961-3.

Coloured motor mechanics was to be started at the Peninsula Technical College in 1974. A special building was being erected for the purpose. This course would supplement, and not replace, the existing apprenticeship training scheme.

Initially, 40 youths will be selected annually for training, those eligible being lads between the ages of 17 and 21 who have passed Std. VIII. To begin with, they will have to find their own accommodation. They will be paid R16 a week, and receive a free issue of two overalls a year. On successful completion of a three-year course leading to N.T.C. III they will be given a free set of tools. The Department of Labour will help trainees to find employment. They will have to agree to work in the motor trade for at least three years or to repay the costs of their training.

FARM WORKERS

According to the report of the Department of Coloured Relations and Rehoboth Affairs for the year ended 31 March 1972,⁶ 1 816 Coloured farm workers were sent by their employers to attend courses at the Kromme Rhee training centre during that year. Short courses of two weeks' duration are offered, those most in demand being the maintenance of tractors, pruning techniques, the maintenance of buildings, and the classing of wool.

TECHNICAL SECONDARY SCHOOLS

The same report stated⁶ that a technical secondary school course can be taken at schools in Athlone (Cape Town), Port Elizabeth, Worcester, Kimberley, and Oudtshoorn. The Minister said in the Assembly on 7 June⁷ that 102 boys passed a technical J.C. in 1972, and 25 a technical S.C.

INDIAN STUDENTS

CONTROL OF M. L. SULTAN COLLEGE FOR ADVANCED TECHNICAL EDUCATION

It was stated in the report of the Department of Indian Affairs for the year ended 30 June 1972⁸ that the control of the Pietermaritzburg branch of the M.L. Sultan Technical College had been transferred to the Department of Indian Affairs as from 1 April 1972. It would be run as a high school with a technical basis.

The main section of the college, in Durban, remains under the control of its council.⁹ The enrolment as at 30 June 1972 was 6 317 students, of whom 1 265 were studying on a full-time basis.

⁶ R.P. 44/1973, page 6.

⁷ Page 22.

⁸ Hansard 17 col. 978.

⁹ R.P. 36/1973, page 83.

⁹ See 1968 *Survey*, page 250.

APPRENTICES

In the Assembly on 30 April¹⁰ the Minister of Indian Affairs gave detailed statistics in regard to Indian apprentices and the trades which they were studying. The total enrolment at various institutions in 1973 was:

M.L. Sultan Technical College	... ..	446
M.L. Sultan State Indian High School, Stanger	... ..	264
M.L. Sultan State Indian High School, Pietermaritzburg	312
School of Industries, Newcastle	51
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According to an earlier statement by the Minister, those who passed full N.T.C. courses during 1972 were:¹¹

N.T.C. I	—165.
N.T.C. II	—151.
N.T.C. III	—16.
N.T.C. IV	—
N.T.C. V	—2.

OTHER EXAMINATION SUCCESSES AT ADVANCED LEVELS

On the same occasion, the Minister said that examination successes in other fields of study had been:

National Diploma in Medical Technology:	Intermediate—5.
"	Final—1.
"	„ Chemical Technology—5.
"	for Health Inspectors—2.
"	in Architectural Building Draughtsmanship — results awaited ¹²
"	in Public Health Nursing—9.
"	in Commerce—13.
Chartered Institute of Secretaries	—1.
National Secretarial Certificate	—7.
Teaching diplomas in Physical Education	—7.
"	„ Home Economics—6.
"	„ Industrial Art—2.
"	„ Commerce—5.

MORE JUNIOR CLASSES

The Minister stated that the enrolment in 1973 at the M.L. Sultan Technical College and at Departmental schools for more junior classes was:

		<i>Technical</i>	<i>Commercial</i>
Std. VI	... ..	49	59
Std. VII	... ..	338	301
Std. VIII	... ..	213	291

¹⁰ Hansard 12 cols. 755-6.

¹¹ Assembly 1 March, Hansard 4 cols 259-60.

¹² 26 wrote the examination.

		<i>Technical</i>	<i>Commercial</i>
Std. IX	... ..	82	113
Std. X	... ..	93	96

Examination passes in 1972 were:

		<i>Technical</i>	<i>Commercial</i>
Junior Certificate	... ..	152	198
Senior Certificate	... ..	—	12

WHITE STUDENTS

There are much greater numbers of technical classes and types of courses available to Whites than there are for other groups. No comprehensive statistics have been published recently except in regard to the number of N.T.C. passes in 1972, given by the Minister of National Education in the Assembly on 9 April:¹³

N.T.C. I—3 108.

N.T.C. II—2 966.

N.T.C. III—1 980.

N.T.C. IV—958.

N.T.C. V—1 161.

Further information is given in the chapter of this *Survey* dealing with employment.

¹³ Hansard 10 col. 630.