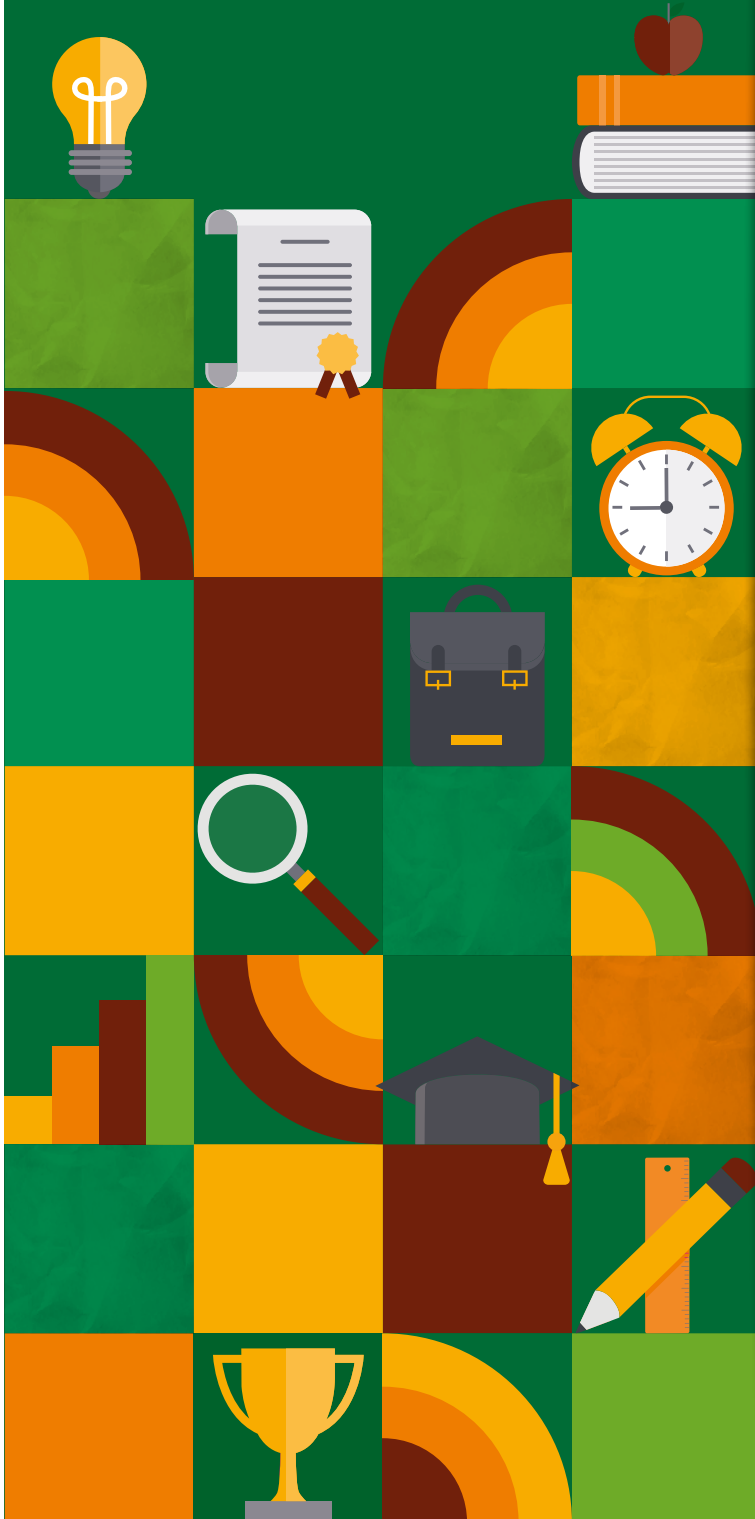


AUGUST 2024

FACT SHEET



THROUGHPUT RATE OF TVET COLLEGE NC(V) (NATIONAL CERTIFICATE VOCATIONAL) STUDENTS



BACKGROUND

Information about throughput rates is crucial to understanding, among others, an education system's level of efficiency. Throughput rates provide insights into how quickly or slowly students move through the system. The slower the movement of students from enrolment to completion, the greater the cost to the system. Moreover, the slow movement of students through the system (which is caused largely by high levels of repetition) creates a bottleneck in the system, resulting in constraints to the number of new entrants admitted to Technical and Vocational Education and Training (TVET) colleges. As the number of students repeating courses overlaps with new student enrolments, entry into required courses becomes harder for all to access. Bottlenecks can cause both the student and the institution to incur increased education costs, waste time and delay completion. Low throughput rates impede student progress, increase costs, and impact negatively on teaching and learning, and on the ability of institutions to facilitate student success. Delays in the completion of qualifications entail a waste of resources both at individual and collective levels. They also deprive the economy of adequate numbers of new graduates.



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To that effect, this Fact Sheet provides information and insights into the extent and nature of the throughput rate of TVET college students enrolled in the National Certificate (Vocational) (NC[V]) programmes. The NC(V), which is a three-year qualification, was introduced by the then Department of Education at public TVET colleges in 2007 to respond to the priority skills demands of the South African economy. TVET colleges continue to offer the NC(V); however, many stakeholders have expressed concern about the low numbers of students completing the full NC(V) qualification within expected time frames. Thus, insights from this Fact Sheet can be drawn upon to inform interventions to address relevant challenges and to improve accountability in the system.



Throughput rate is defined as the rate at which a student cohort successfully completes a qualification within the stipulated timeframe for that qualification.



DEFINITION AND METHODOLOGY USED TO CALCULATE THROUGHPUT RATE

Throughput rate is defined as the rate at which a student cohort successfully completes a qualification within the stipulated timeframe for that qualification.¹ For the purposes of this Fact Sheet, the throughput rate was calculated based on a comparison of the same cohort of students who enrolled for the first time at Level 2 in 2020 and who completed Level 4 in 2022. Enrolment data at Level 2 in 2017, 2018, 2019 and 2020 was merged with examinations data for 2022. The TVET Management Information System (TVETMIS) database was used as the data source for the Level 2 enrolment data, and the DHET National Examinations database was used as the data source for the completion/certification data.

The enrolment number of the NC(V) Level 2 cohort was 71 052. In the trace of the 2017 to 2019 databases, a total of 12 922 previous enrolments for these records was found. A total of 7806 records were excluded from the denominator in the calculation. These students were previously enrolled in NC(V) programmes and are therefore regarded as

repeaters. The other enrolment ranged from programmes (introductory to N6 level), occupational qualifications and the Pre-Vocational Learning Programme (PLP). Thus, the total number of new entrants in Level 2 in 2020 was 63 246 students.



LIMITATIONS

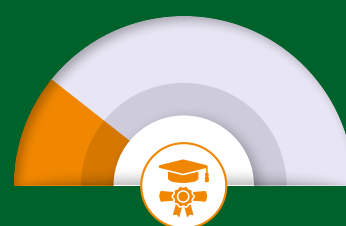
An anomaly in the calculation of the throughput rate was identified more than two years ago. While the overall underperformance in TVET colleges might be attributed to pockets of poor teaching and learning in some colleges, the overwhelming factor accounting for the statistical underperformance is an anomaly in the calculation of the throughput rate, whereby students are fully funded (including by NSFAS) for the minimum period of study (referred to as N) plus one additional period of study (referred to as N+1). However, the throughput rate is calculated using only the N period. This calculation was reviewed and it was agreed that it should be adjusted to make provision for the N+1 certifications. At the time of reporting, the N+1 certification dataset was not available, meaning the method could not be implemented.



SUMMARY OF FINDINGS

Figure 1 shows the trend in throughput rates over four years. The latest figure (the 2022 throughput rate) shows that 11.1% of the students who enrolled for NC(V) Level 2 in 2020 for the first time (as new entrants) completed this qualification within the expected time frame (of 3 years) in 2022. This figure reflects an increase of 0.3 percentage points from 2021. Of the 63 246 students who enrolled for NC(V) Level 2 in 2020 for the first time (as new entrants), only 7 001 completed this qualification within the expected time frame (of 3 years) in 2022.

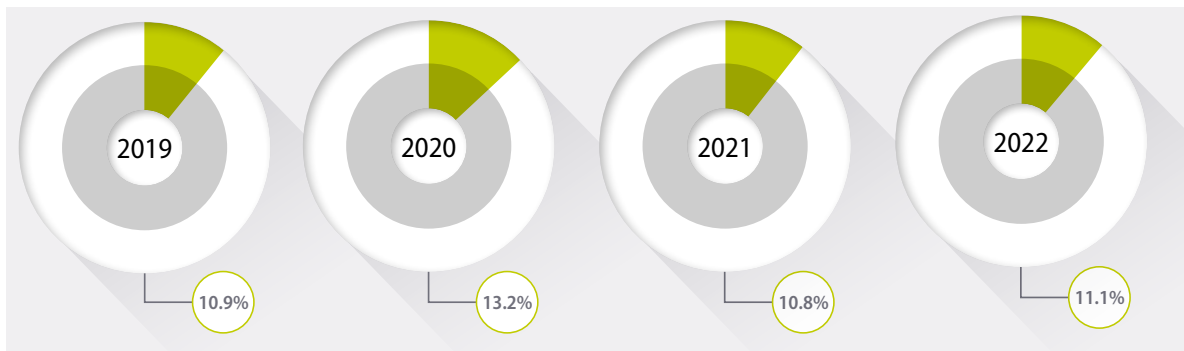
THE 2022 THROUGHPUT RATE SHOWS THAT



11.1%

of the students who enrolled for NC(V) Level 2 in 2020 for the first time (as new entrants) completed this qualification within the expected time frame (of 3 years) in 2022

FIGURE 1: Overall throughput rate of NC(V) Level 2 students, 2019–2022



Sources: TVETMIS and DHET National Examinations databases.

Note: The students who enrolled for NCV Level 2 in 2020 for the first time (as new entrants) were compared with those students who completed NCV Level 4 in 2022.

Figure 2 shows that the throughput rate differs significantly across gender. The NC(V) Level 2 throughput rate for females was almost twice that for males in all the years under review. In 2022, the throughput rate for females was double that of the male throughput rate of 6.7%, and 2.3 percentage points higher than the overall throughput rate of 11.1%.

FIGURE 2: Overall throughput rate by gender, 2019–2022

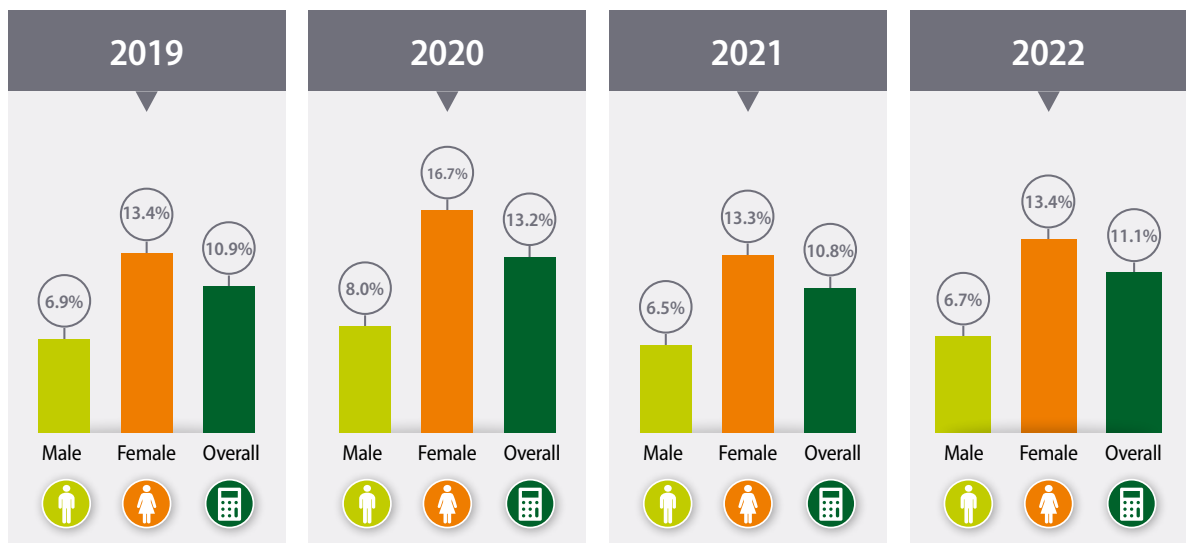





Figure 3 represents the throughput rate of NC(V) Level 2 students enrolled in 2022 in TVET colleges by programme. The highest throughput rate was in the Primary Health programme (26.3%), followed by Education and Development (23.8%) and Office Administration (19.2%). The Electrical Infrastructure and Construction programme had the lowest throughput rate (3.2%), which was 7.9 percentage points lower than the overall throughput rate. It appears that engineering-related programmes had the lowest throughput rates.

FIGURE 3: Throughput rate by NC(V) programme, 2022

			
PROGRAMME TYPE	NUMBER ENROLLED (NC(V)2, 2020)	NUMBER COMPLETED (NC(V)4, 2022)	THROUGHPUT RATE (%)
1 Drawing Office Practice	94	–	–
2 Electrical Infrastructure and Construction	8 189	265	3.2%
3 Information Technology and Computer Science	3 875	200	5.2%
4 Process Plant Operations	225	12	5.3%
5 Civil Engineering and Building Construction	4 952	304	6.1%
6 Engineering and Related Design	8 662	566	6.5%
7 Mechatronics	463	35	7.6%
8 Marketing	2 431	215	8.8%
9 Safety in Society	1 990	203	10.2%
10 Finance, Economics and Accounting	3 606	382	10.6%
11 Hospitality	3 837	428	11.2%
12 Management	2 974	373	12.5%
13 Primary Agriculture	1 821	244	13.4%
14 Transport and Logistics	1 988	310	15.6%
15 Tourism	4 242	692	16.3%
16 Office Administration	11 913	2 290	19.2%
17 Education and Development	1 600	381	23.8%
18 Primary Health	384	101	26.3%
Total	63 246	7 001	11.1

Sources: TVETMIS and DHET National Examinations databases.

Note: The students who enrolled for NCV Level 2 in 2020 for the first time (as new entrants) were compared with those students who completed NCV Level 4 in 2022.

Figure 4 shows the throughput rate in 2022 by college. The TVET colleges with the highest throughput rates for the 2020 NC(V) Level 2 cohort were Waterberg TVET College (24.1%) and Northlink TVET College (20.7%). Flavius Mareka TVET College had the lowest throughput rate (2.7%), followed by Northern Cape Rural TVET College (3.0%). It is concerning that the throughput rates of 60% of TVET colleges were below the overall average of 11.1% in 2022.

FIGURE 4: Throughput rate by college, 2022







				
COLLEGE		NUMBER ENROLLED (NC(V)2, 2020)	NUMBER COMPLETED (NC(V)4, 2022)	THROUGHPUT RATE (%)
1	Waterberg TVET College	999	241	24.1%
2	Northlink TVET College	610	126	20.7%
3	Capricorn TVET College	2 075	390	18.8%
4	Orbit TVET College	1 255	225	17.9%
5	College of Cape Town TVET College	1 444	246	17.0%
6	Mthashana TVET College	746	117	15.7%
7	False Bay TVET College	581	90	15.5%
8	Maluti TVET College	1 993	304	15.3%
9	Esayidi TVET College	1 146	162	14.1%
10	Majuba TVET College	1 902	254	13.4%
11	Gert Sibande TVET College	2 181	290	13.3%
12	TaletsoTVET College	815	105	12.9%
13	Boland TVET College	707	89	12.6%
14	Ekurhuleni West TVET College	3 710	467	12.6%
15	Mopani TVET College	1 978	245	12.4%
16	Lephalele TVET College	574	71	12.4%
17	Eastcape Midlands TVET College	1 160	140	12.1%
18	Elangeni TVET College	1 596	181	11.3%
19	Letaba TVET College	937	105	11.2%
20	Lovedale TVET College	689	77	11.2%
21	Vhembe TVET College	1 530	168	11.0%
22	Tshwane North TVET College	1 389	151	10.9%
23	West Coast TVET College	1 359	147	10.8%
24	Buffalo City TVET College	1 165	126	10.8%
25	South West Gauteng TVET College	3 164	336	10.6%

FIGURE 4: Throughput rate by college, 2022 (continued)













			
COLLEGE	NUMBER ENROLLED (NC(V)2, 2020)	NUMBER COMPLETED (NC(V)4, 2022)	THROUGHPUT RATE (%)
26 Ikhala TVET College	793	82	10.3%
27 Tshwane South TVET College	1 136	117	10.3%
28 Ingwe TVET College	1 210	124	10.2%
29 Western TVET College	804	79	9.8%
30 King Hintsa TVET College	479	47	9.8%
31 Thekwini TVET College	1 009	98	9.7%
32 South Cape TVET College	647	62	9.6%
33 Ehlanzeni TVET College	1 814	168	9.3%
34 Umfolozi TVET College	1 506	134	8.9%
35 Ekurhuleni East TVET College	2 084	179	8.6%
36 Nkangala TVET College	1 412	120	8.5%
37 Umgungundlovu TVET College	957	80	8.4%
38 Vuselela TVET College	1 059	83	7.8%
39 Metheo TVET College	733	57	7.8%
40 Costal TVET College	2 496	192	7.7%
41 Port Elizabeth TVET College	1 168	89	7.6%
42 Sekhukhune TVET College	767	56	7.3%
43 King Sabata Dalindyebo TVET College	1 221	79	6.5%
44 Northern Cape Urban TVET College	891	54	6.1%
45 Sedibeng TVET College	1 831	110	6.0%
46 Mnambithi TVET College	677	35	5.2%
47 Goldfields TVET College	792	37	4.7%
48 Central Johannesburg TVET College	1 018	36	3.5%
49 Northern Cape Rural TVET College	666	20	3.0%
50 Flavius Mareka TVET College	371	10	2.7%
Total	63 246	7 001	11.1

Sources: TVETMIS and DHET National Examinations databases.

Note: The students who enrolled for NC(V) Level 2 in 2020 for the first time (as new entrants) were compared with those students who completed NC(V) Level 4 in 2022.

Figure 5 shows that Limpopo had the highest throughput rate at 14.4%, which was 3.3 percentage points higher than the overall throughput rate of 11.1%, followed by the Western Cape with 14.2% and North West with 13.2%, respectively. The province with the lowest throughput rate was the Northern Cape, with a throughput rate of 4.8%, which is 6.3 percentage points lower than the overall throughput rate.

FIGURE 5: Throughput rate by province, 2022

			
PROVINCE	NUMBER ENROLLED (NC(V)2, 2020)	NUMBER COMPLETED (NC(V)4, 2022)	THROUGHPUT RATE (%)
 Limpopo	8 860	1 276	14.4%
 Western Cape	5 348	760	14.2%
 North West	3 129	413	13.2%
 Mpumalanga	5 407	578	10.7%
 Free State	3 889	408	10.5%
 KwaZulu-Natal	12 035	1 253	10.4%
 Gauteng	15 136	1 475	9.7%
 Eastern Cape	7 885	764	9.7%
 Northern Cape	1 557	74	4.8%
Total	63 246	7 001	11.1%

Sources: TVETMIS and DHET National Examinations databases.

Note: The students who enrolled for NC(V) Level 2 in 2020 for the first time (as new entrants) were compared with those students who completed NC(V) Level 4 in 2022.

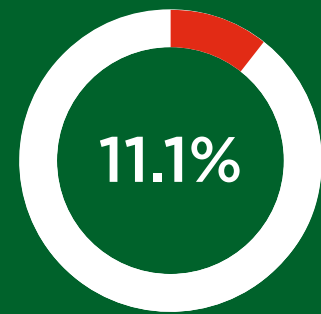


CONCLUSION

This Fact Sheet highlights that only 11.1% of students who enrolled for the NC(V) in 2020 completed the qualification within the three-year expected time frame (in 2022). Furthermore, it shows significant differences in the throughput rates across gender, provinces, TVET colleges and several of the programmes they offer. Limpopo was the leading province, with the highest throughput rate, while Northern Cape had the lowest. Overall, it appears that programmes with a focus on engineering seem to have had the lowest throughput rates, while the Primary Health, Education and Development, and Office Administration programmes had the highest rates.

Challenges in throughput rates raise concerns about high dropout rates, extended study durations, low graduation rates, and the education system's overall efficiency in facilitating student progression. To promote socioeconomic growth in the nation, improve workforce preparedness and guarantee equal access to higher education, it is imperative that throughput rate issues at South African institutions be addressed. Ongoing collaboration between educational institutions and government agencies is essential to implementing effective strategies and supporting student success.

THIS FACT SHEET INDICATES
THAT ONLY



OF STUDENTS WHO ENROLLED
FOR THE NC(V) IN 2020
COMPLETED THE QUALIFICATION
WITHIN THE THREE-YEAR
EXPECTED TIME FRAME



TABLE 1: Eastern Cape throughput rate




TVET COLLEGE	 L4 CERTIFIED	 L2 COHORT	 THROUGHPUT RATE (%)
Buffalo City TVET College	126	1 165	10.8%
East Cape Midlands TVET College	140	1 160	12.1%
Ikhala TVET College	82	793	10.3%
Ingwe TVET College	124	1 210	10.2%
King Hintsa TVET College	47	479	9.8%
King Sabata Dalindyebo TVET College	79	1 221	6.5%
Lovedale TVET College	77	689	11.2%
Port Elizabeth TVET College	89	1 168	7.6%
Totals and rates	764	7 885	9.7%

TABLE 2: Free State throughput rate




TVET COLLEGE	 L4 CERTIFIED	 L2 COHORT	 THROUGHPUT RATE (%)
Flavius Mareka TVET College	10	371	2.7%
Goldfields TVET College	37	792	4.7%
Maluti TVET College	304	1 993	15.3%
Motheo TVET College	57	733	7.8%
Totals and rates	408	3 889	10.5%

TABLE 3: Gauteng throughput rate




			
TVET COLLEGE	L4 CERTIFIED	L2 COHORT	THROUGHPUT RATE (%)
Central Johannesburg TVET College	36	1 018	3.5%
Ekurhuleni East TVET College	179	2 084	8.6%
Ekurhuleni West TVET College	467	3 710	12.6%
Sedibeng TVET College	110	1 831	6.0%
South West Gauteng TVET College	336	3 164	10.6%
Tshwane North TVET College	151	1 389	10.9%
Tshwane South TVET College	117	1 136	10.3%
Western TVET College	79	804	9.8%
Totals and rates	1 475	15 136	9.7%

TABLE 4: KwaZulu-Natal throughput rate




			
TVET COLLEGE	L4 CERTIFIED	L2 COHORT	THROUGHPUT RATE (%)
Costal TVET College	192	2 496	7.7%
Elangeni TVET College	181	1 596	11.3%
Esayidi TVET College	162	1 143	14.1%
Majuba TVET College	254	1 902	13.4%
Mnambithi TVET College	35	677	5.2%
Mthashana TVET College	117	746	15.7%
Thekwini TVET College	98	1 009	9.7%
Umfolozu TVET College	134	1 506	8.9%
Umgungundlovu TVET College	80	957	8.4%
Totals and rates	1 253	12 035	10.4%

TABLE 5: Limpopo throughput rate




			
TVET COLLEGE	L4 CERTIFIED	L2 COHORT	THROUGHPUT RATE (%)
Capricorn TVET College	390	2 075	18.8%
Lephalele TVET College	71	574	12.4%
Letaba TVET College	105	937	11.2%
Mopani TVET College	245	1 978	12.4%
Sekhukhune TVET College	56	767	7.3%
Vhembe TVET College	168	1 530	11.0%
Waterberg TVET College	241	999	24.1%
Totals and rates	1 276	8 860	14.4%

TABLE 6: Mpumalanga throughput rate




			
TVET COLLEGE	L4 CERTIFIED	L2 COHORT	THROUGHPUT RATE (%)
Ehlanzeni TVET College	168	1 814	9.3%
Gert Sibande TVET College	290	2 181	13.3%
Nkangala TVET College	120	1 412	8.5%
Totals and rates	578	5 407	10.7%

TABLE 7: North West throughput rate




			
TVET COLLEGE	L4 CERTIFIED	L2 COHORT	THROUGHPUT RATE (%)
Orbit TVET College	225	1 255	17.9%
Taletso TVET College	105	815	12.9%
Vuselela TVET College	83	1 059	7.8%
Totals and rates	413	3 129	13.2%

TABLE 8: Western Cape throughput rate







			
TVET COLLEGE	L4 CERTIFIED	L2 COHORT	THROUGHPUT RATE (%)
Boland TVET College	126	1 165	10.8%
College of Cape Town TVET College	140	1 160	12.1%
False Bay TVET College	82	793	10.3%
Northlink TVET College	124	1 210	10.2%
South Cape TVET College	47	479	9.8%
West Coast TVET College	79	1 221	6.5%
Totals and rates	764	7 885	9.7%

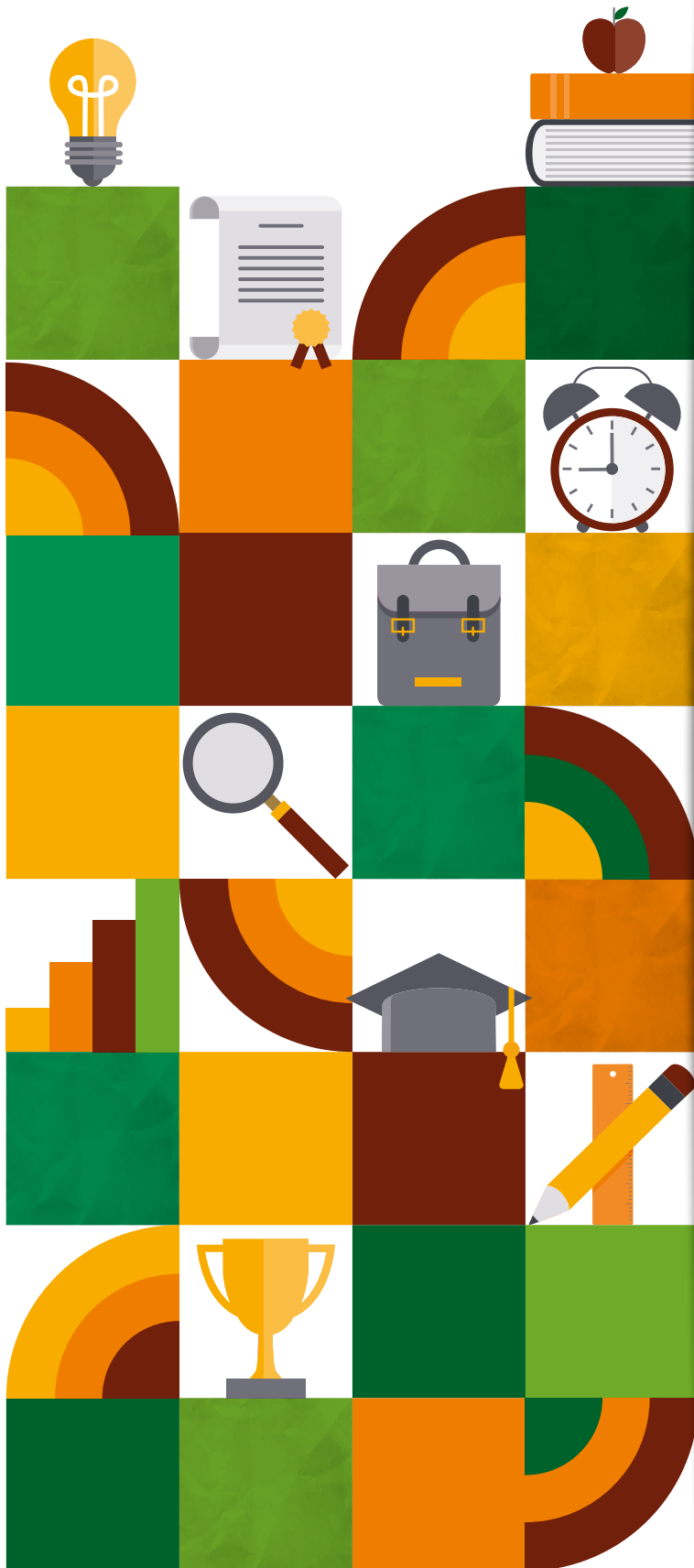
TABLE 9: Northern Cape throughput rate

			
TVET COLLEGE	L4 CERTIFIED	L2 COHORT	THROUGHPUT RATE (%)
Northern Cape Rural TVET College	20	666	3.0%
Northern Cape Urban TVET College	54	891	6.1%
Totals and rates	74	1 557	4.8%



ENDNOTES

1. DHET. 2021. Dictionary of Terms and Concepts for Post-School Education and Training, 2021.



AUTHOR:

Dr M Swart, M Khuluvhe and W Gwantshu

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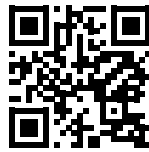
Department of Higher Education and Training
123 Francis Baard Street
Pretoria
South Africa

Private Bag X174
Pretoria
0001

Tel: 0800 87 22 22
www.dhet.gov.za

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www.dhet.gov.za

ENQUIRIES:

Tel.: 012 312 5465

Email: khuluvhe.m@dhet.gov.za



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REPUBLIC OF SOUTH AFRICA