NSW Skills Plan – Critical Skills Areas Data Appendix

The NSW Skills Plan identifies six Critical Skills Areas (CSAs) that represent NSW Government priorities and national priorities under the National Skills Agreement, covering industries with chronic and persistent shortages and those undergoing significant structural changes.

The six CSAs are:

Construction – housing and infrastructure	Care and support economy
Net Zero and energy transition	Agriculture and agrifood
Digital and cyber	Advanced manufacturing

These sectors will guide investment and workforce interventions over the period of the plan, noting that the scope of CSAs may change and evolve over time to respond to future challenges. Importantly, solving some areas of skills shortage enables shortages in other areas to be filled. Housing and infrastructure, transport, care and support as well as digital skills are examples of interconnected key enablers, particularly for regional NSW.

Addressing Critical Skills Areas involves identifying the key drivers of shortages and demand factors relevant to each sector and responding to this through the right mix of policy, product, delivery and workforce levers. This requires joint effort across governments, industry and education and training providers. For example, the NSW Government can implement policy and funding settings that promote access to high-quality training; however, addressing issues such as high turnover rates of staff due to workplace conditions or lack of diversity in a sector requires direct industry involvement.

This document contains high-level profiles that have been developed to understand each of the CSAs within the context of the NSW skills system. Relevant occupations and qualifications have been mapped to each CSA based on research, advice, or training packages at the Australian and New Zealand Standard Classification of Occupations (ANZSCO) Level 4. Some occupations may cross multiple CSAs and are not mutually exclusive to one. Mapping is a point-in-time assessment and may change over time which will subsequently alter the corresponding data presented under each area.
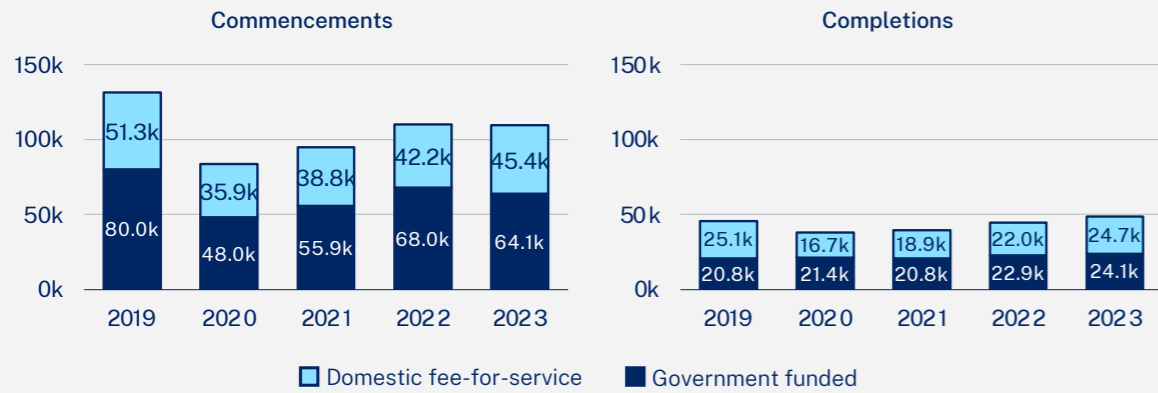
Construction – housing and infrastructure

With its growing population, NSW needs to increase housing supply and infrastructure for all residents.
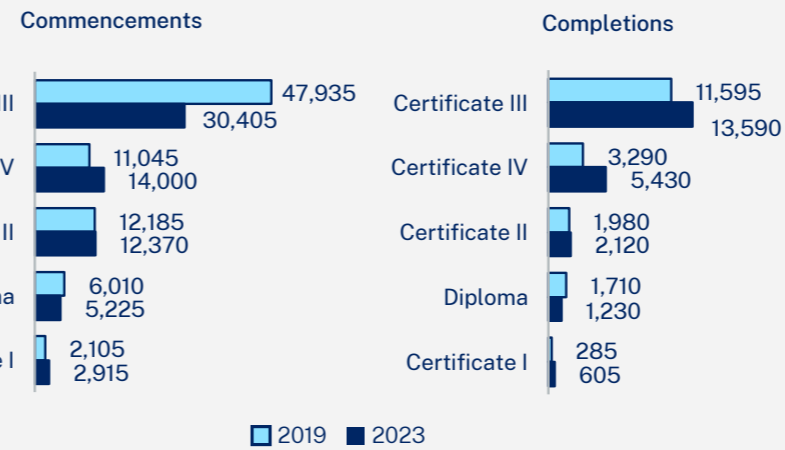
From 2019 to 2023, government-funded students saw a significant decrease in commencements and a notable increase in completions.

Training activity by funding type (2019–2023)*

Commencements

Year	Government funded	Domestic fee-for-service
2019	80.0k	51.3k
2020	48.0k	35.9k
2021	55.9k	38.8k
2022	68.0k	42.2k
2023	64.1k	45.4k

Completions

Year	Government funded	Domestic fee-for-service
2019	20.8k	25.1k
2020	21.4k	16.7k
2021	20.8k	18.9k
2022	22.9k	22.0k
2023	24.1k	24.7k

■ Domestic fee-for-service ■ Government funded

Most construction training activity occurred at the Certificate III level, with a significant drop in commencements and a notable increase in completions from 2019 to 2023.

Commencements

Level	2019	2023
Certificate III	47,935	30,405
Certificate IV	11,045	14,000
Certificate II	12,185	12,370
Diploma	6,010	5,225
Certificate I	2,105	2,915

Completions

Level	2019	2023
Certificate III	11,595	13,590
Certificate IV	3,290	5,430
Certificate II	1,980	2,120
Diploma	1,710	1,230
Certificate I	285	605

■ 2019 ■ 2023

In 2023, TAFE had the highest share of both commencements and completions. Private providers had a lower share of commencements but a higher share in completions compared to other providers.

Share of training activity by provider type in 2023

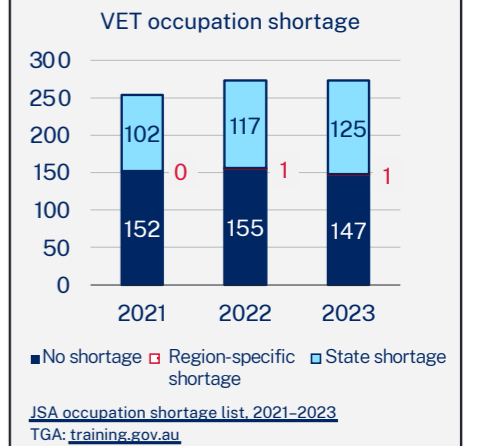| Providers	Commencements	Completions
TAFE	64%	74%
Private	15%	19%
Other providers	21%	7%

Note:
Other providers refer to community providers, other government providers and other training providers.

Female students experienced growth in both commencements and completions. In contrast, students with disability saw declines in both categories. All other student groups experienced decreases in student commencements but increases in completions.

Line charts: Students with disability; Aboriginal and/or Torres Strait Islander; Females; Low SES; Regional/remote; Language other than English; Apprentices and trainees (2019–2023)

···● Commencements ─●─ Completions

State shortage increased steadily from 2021 to 2023.

VET occupation shortage

Year	No shortage	State shortage	Region-specific shortage
2021	152	102	0
2022	155	117	1
2023	147	125	1

■ No shortage ⊡ Region-specific shortage ▣ State shortage

JSA occupation shortage list, 2021–2023
TGA: training.gov.au

*NCVER, 2024, Total VET students and courses: program enrolments and completions, 2019–2023, State of residence: NSW; NCVER, 2024, Government-funded students and courses: program enrolments and completions, 2019–2023, State of residence: NSW
There were 91 occupations mapped for this critical skills area by ANZSCO-4digit. These occupations are mapped to full qualifications. Completion numbers are based on students who successfully completed in the relevant year and do not follow students who commenced in that year.
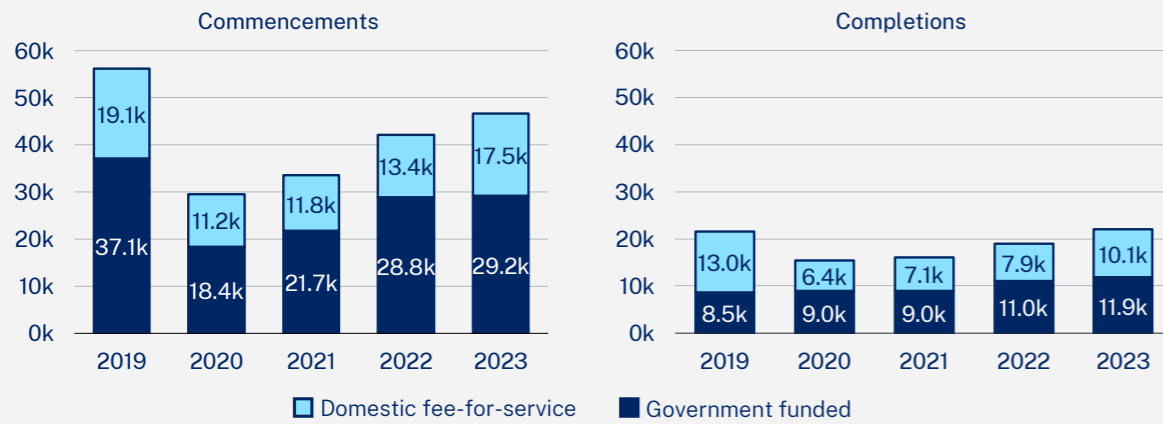
Net Zero and energy transition

Reaching Net Zero by 2050 needs a clean energy workforce that will enable the transition to renewable energy sources.
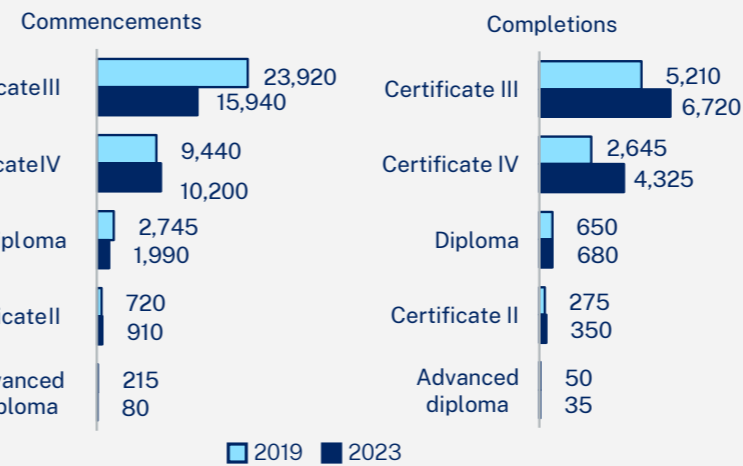
Between 2019 and 2023, fewer students commenced Net Zero and energy transition courses. During the same time period, student completions increased for government-funded students.

Training activity by funding type (2019–2023)*

Commencements

Year	Government funded	Domestic fee-for-service
2019	37.1k	19.1k
2020	18.4k	11.2k
2021	21.7k	11.8k
2022	28.8k	13.4k
2023	29.2k	17.5k

Completions

Year	Government funded	Domestic fee-for-service
2019	8.5k	13.0k
2020	9.0k	6.4k
2021	9.0k	7.1k
2022	11.0k	7.9k
2023	11.9k	10.1k

☐ Domestic fee-for-service   ■ Government funded

Most Net Zero and energy transition training activity occurred at the Certificate III level, with a significant drop in commencements and a substantial increase in completions from 2019 to 2023.

Commencements

Level	2019	2023
Certificate III	23,920	15,940
Certificate IV	9,440	10,200
Diploma	2,745	1,990
Certificate II	720	910
Advanced diploma	215	80

Completions

Level	2019	2023
Certificate III	5,210	6,720
Certificate IV	2,645	4,325
Diploma	650	680
Certificate II	275	350
Advanced diploma	50	35

☐ 2019   ■ 2023

In 2023, TAFE had the highest share of both commencements and completions, followed by private providers and other providers.

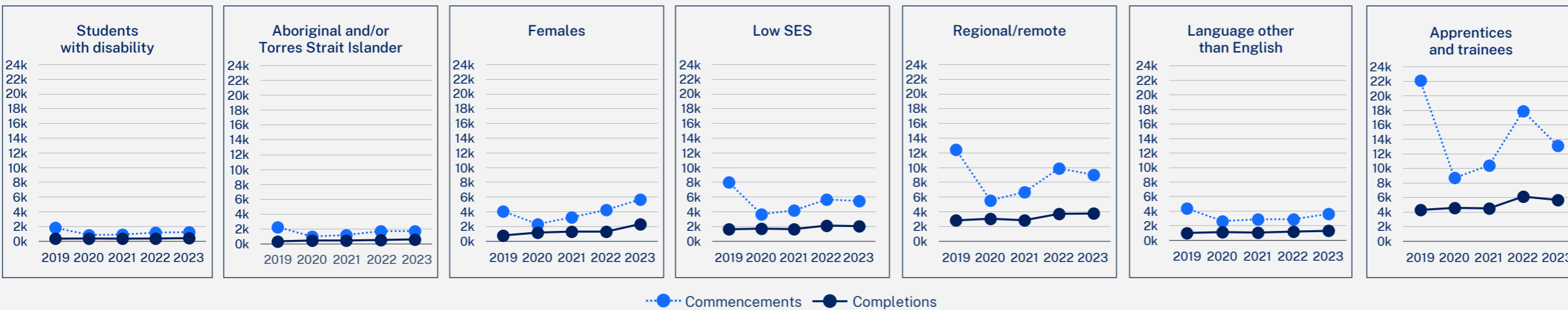## Share of training activity by provider type in 2023

Providers	Commencements	Completions
TAFE	79%	76%
Private	12%	14%
Other providers	8%	10%

Note:
Other providers refer to community providers, other government providers and other training providers.
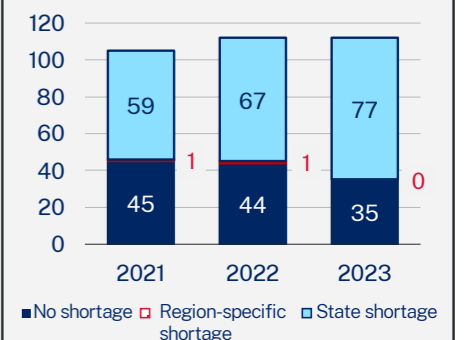
All student groups apart from females experienced declines in student commencements between 2019 and 2023, but all groups had growth in completions in the same period.

Students with disability
(2019 2020 2021 2022 2023)

Aboriginal and/or Torres Strait Islander
(2019 2020 2021 2022 2023)

Females
(2019 2020 2021 2022 2023)

Low SES
(2019 2020 2021 2022 2023)

Regional/remote
(2019 2020 2021 2022 2023)

Language other than English
(2019 2020 2021 2022 2023)

Apprentices and trainees
(2019 2020 2021 2022 2023)

•••• Commencements   —— Completions

State shortage increased significantly while no region-specific shortage was reported in 2023

VET occupation shortage

Year	No shortage	Region-specific shortage	State shortage
2021	45	1	59
2022	44	1	67
2023	35	0	77

■ No shortage   ☐ Region-specific shortage   ☐ State shortage

JSA occupation shortage list, 2021–2023
TGA: training.gov.au

*NCVER, 2024, Total VET students and courses: program enrolments and completions, 2019–2023, State of residence: NSW; NCVER, 2024, Government-funded students and courses: program enrolments and completions, 2019–2023, State of residence: NSW
There were 40 occupations mapped for this critical skills area by ANZSCO-4digit. These occupations are mapped to full qualifications. Completion numbers are based on students who successfully completed in the relevant year and do not follow students who commenced in that year.

Digital and cyber

Technological advances are creating new industries and transforming the way we live, work and learn. Digital skills are now essential for individuals and companies.

Between 2019 and 2023, the digital and cyber sector experienced substantial growth in both student commencements and completions, concentrated heavily in government-funded training activity.

Training activity by funding type (2019–2023)*

Commencements

Year	Domestic fee-for-service	Government funded
2019	1.5k	9.1k
2020	1.2k	8.5k
2021	1.7k	8.9k
2022	1.9k	11.9k
2023	2.1k	15.8k

Completions

Year	Domestic fee-for-service	Government funded
2019	0.6k	2.5k
2020	0.5k	2.0k
2021	0.9k	2.8k
2022	1.1k	1.9k
2023	1.1k	3.7k

☐ Domestic fee-for-service   ■ Government funded

Unlike other critical skills areas, most digital and cyber students were at the Certificate IV level, with training activity more than doubling from 2019 to 2023.

Commencements

Level	2019	2023
Certificate IV	3,505	8,590
Certificate III	3,420	4,095
Diploma	1,670	2,860
Advanced diploma	485	40

Completions

Level	2019	2023
Certificate IV	990	1,650
Certificate III	770	1,225
Diploma	595	555
Advanced diploma	175	10

☐ 2019   ■ 2023

In 2023, TAFE had the highest share of both commencements and completions, followed by private providers and other providers.

Share of training activity by provider type in 2023

Providers	Commencements	Completions
TAFE	87%	80%
Private	9%	19%
Other providers	3%	0%

Note:
Other providers refer to community providers, other government providers and other training providers.

Female students had the highest growth in digital and cyber commencements and completions, followed by students with a language other than English and low socioeconomic background students. Students with disability experienced declines in both categories. In contrast, Aboriginal and/or Torres Strait Islander students and regional students saw notable increases in commencements but decreases in completions.

Students with disability (2019 2020 2021 2022 2023)

Aboriginal and/or Torres Strait Islander (2019 2020 2021 2022 2023)

Females (2019 2020 2021 2022 2023)

Low SES (2019 2020 2021 2022 2023)

Regional/remote (2019 2020 2021 2022 2023)

Language other than English (2019 2020 2021 2022 2023)

Apprentices and trainees (2019 2020 2021 2022 2023)

⋯●⋯ Commencements   ━●━ Completions

More state shortage was reported in 2023 compared to 2021

VET occupation shortage

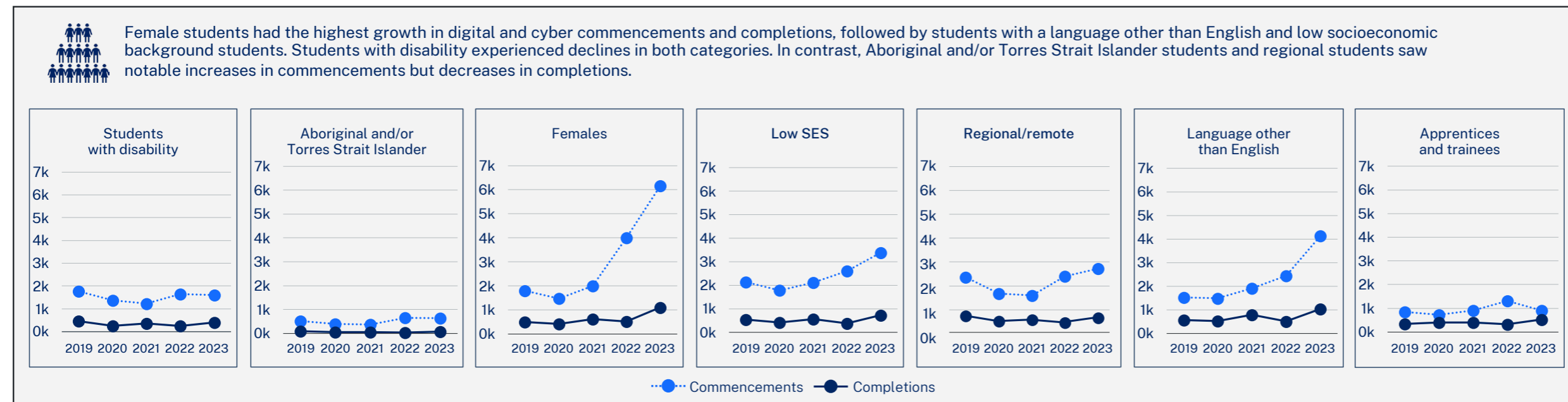| Year	State shortage	No shortage	Region-specific shortage
2021	36	38	0
2022	34	46	0
2023	41	39	0

■ No shortage   □ Region-specific shortage   ☐ State shortage

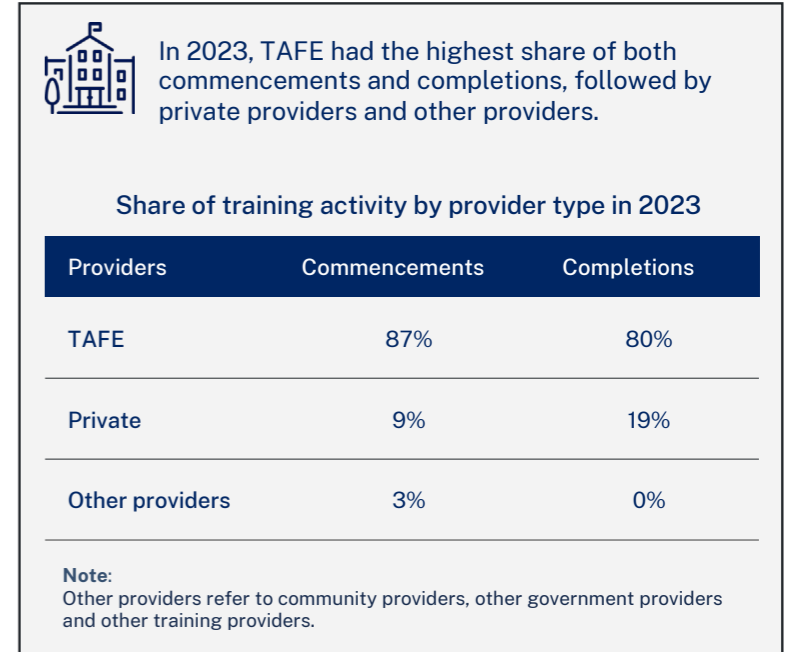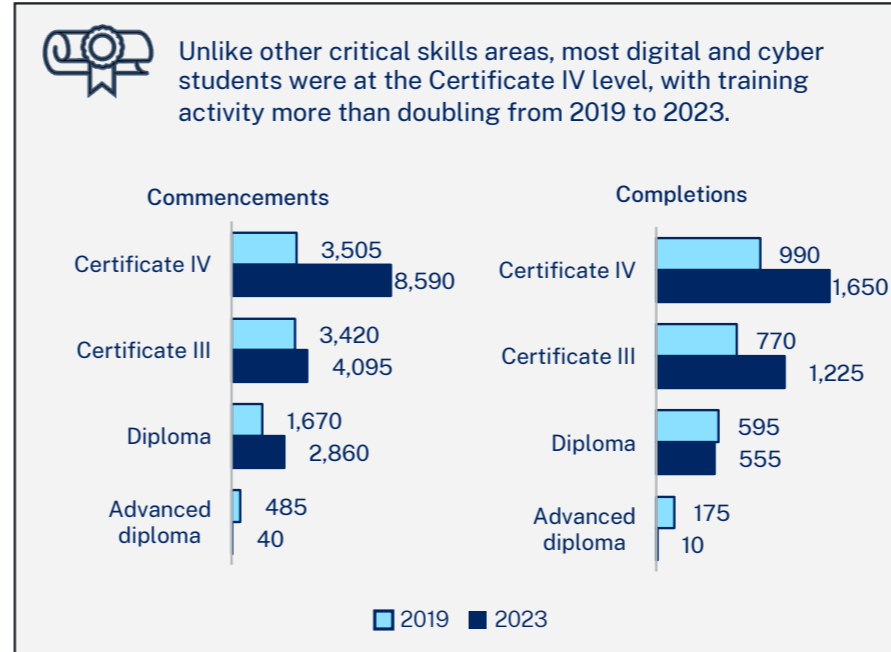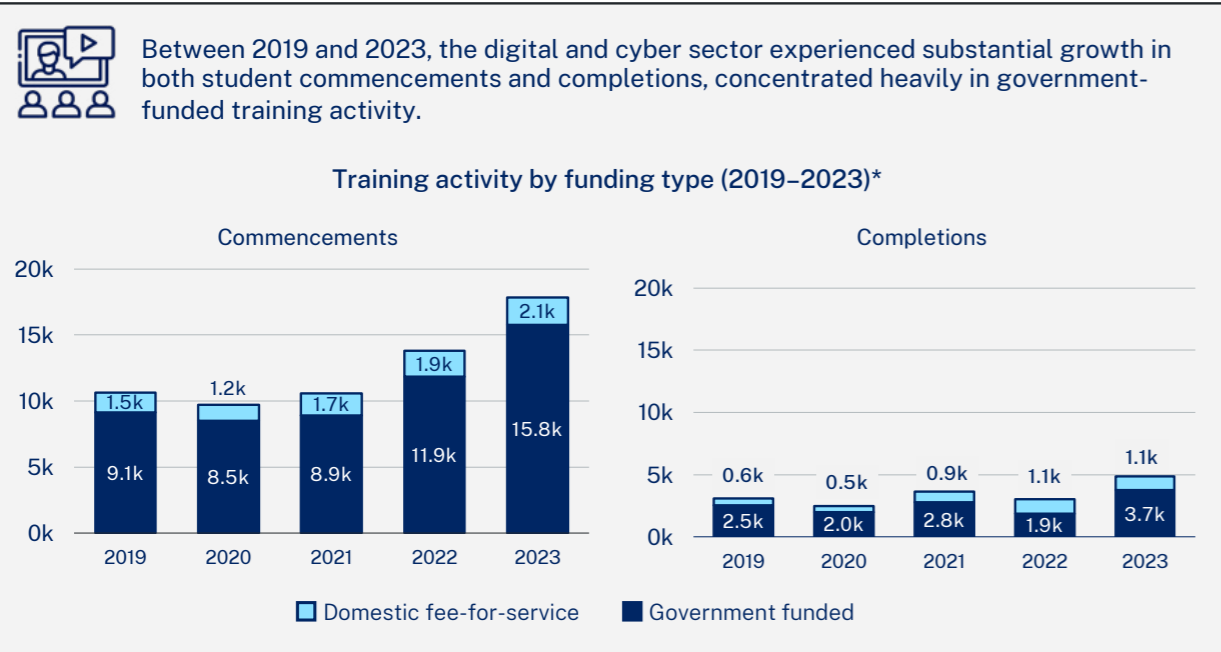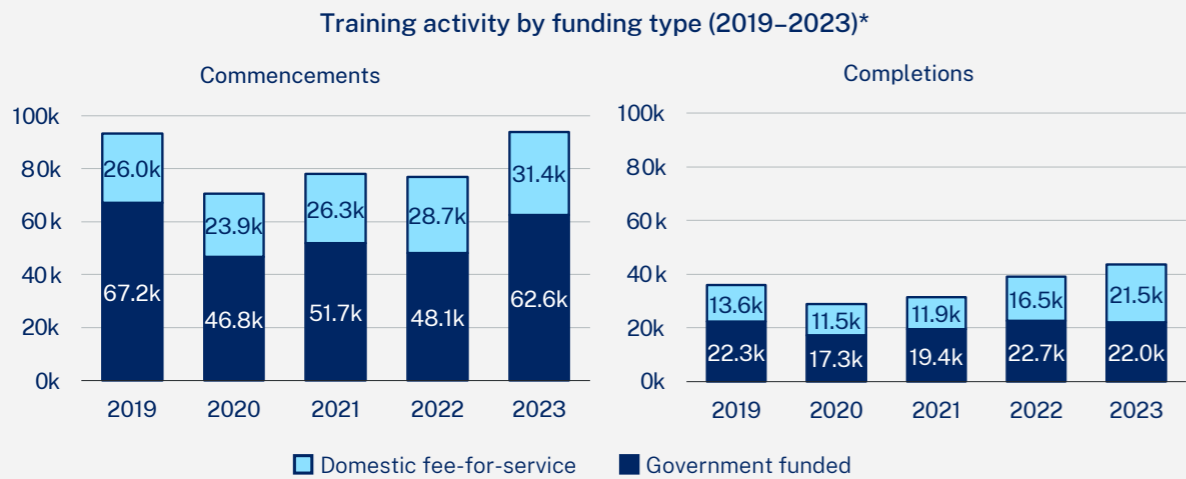JSA occupation shortage list, 2021–2023
TGA: training.gov.au

*NCVER, 2024, Total VET students and courses: program enrolments and completions, 2019–2023, State of residence: NSW; NCVER, 2024, Government-funded students and courses: program enrolments and completions, 2019–2023, State of residence: NSW
There were 30 occupations mapped for this critical skills area by ANZSCO-4digit. These occupations are mapped to full qualifications. Completion numbers are based on students who successfully completed in the relevant year and do not follow students who commenced in that year.
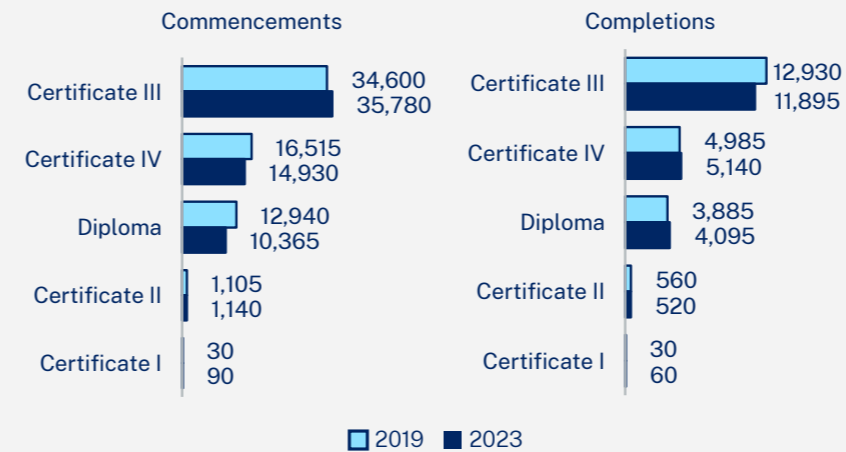
Care and support economy

Care involves activities that develop and maintain peoples' capabilities, independence or quality of life. This includes early childhood education and care, disability care, and aged care. These activities make a significant contribution to the overall workforce and economy.

Government-funded student commencements and completions in care and support economy courses fluctuated during the pandemic and remained below 2019 levels in 2023.

Training activity by funding type (2019–2023)*

Commencements

Year	Government funded	Domestic fee-for-service
2019	67.2k	26.0k
2020	46.8k	23.9k
2021	51.7k	26.3k
2022	48.1k	28.7k
2023	62.6k	31.4k

Completions

Year	Government funded	Domestic fee-for-service
2019	22.3k	13.6k
2020	17.3k	11.5k
2021	19.4k	11.9k
2022	22.7k	16.5k
2023	22.0k	21.5k

☐ Domestic fee-for-service ■ Government funded

Most care and support economy training activity occurred at the Certificate III level, with an increase in commencements and a decrease in completions between 2019 and 2023.
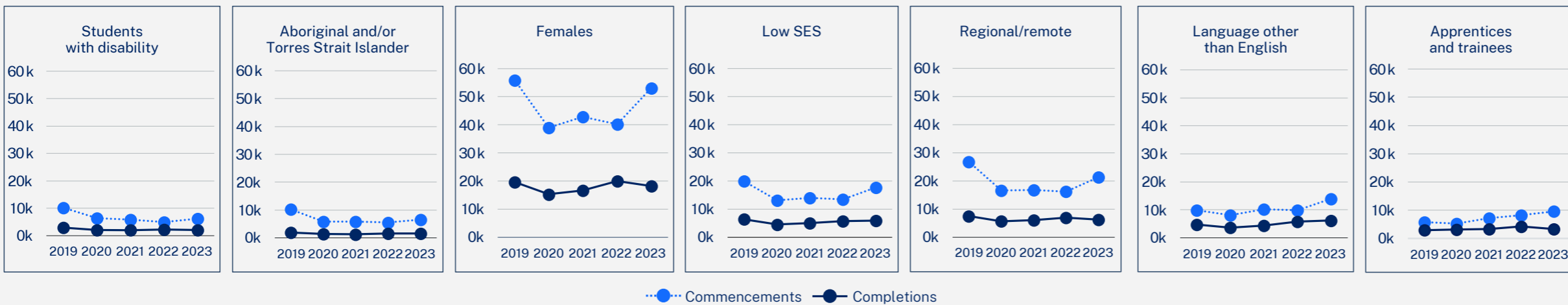
Commencements

	2019	2023
Certificate III	34,600	35,780
Certificate IV	16,515	14,930
Diploma	12,940	10,365
Certificate II	1,105	1,140
Certificate I	30	90

Completions

	2019	2023
Certificate III	12,930	11,895
Certificate IV	4,985	5,140
Diploma	3,885	4,095
Certificate II	560	520
Certificate I	30	60

☐ 2019 ■ 2023

In 2023, TAFE had the highest share of both commencements and completions, followed by private providers and other providers.
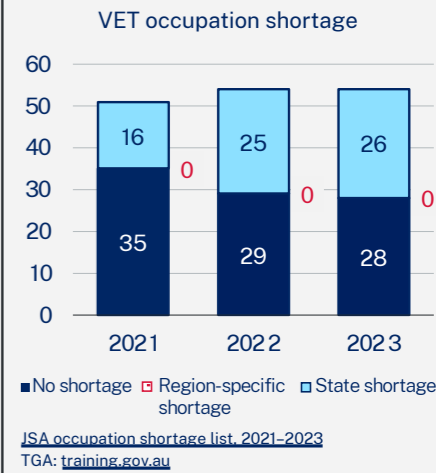
Share of training activity by provider type in 2023

Providers	Commencements	Completions
TAFE	58%	53%
Private	27%	31%
Other Providers	15%	16%

Note:
Other providers refer to community providers, other government providers and other training providers.

Commencements and completions declined across most student groups, except for apprentices and trainees and students with a language other than English who saw significant increases in both categories. Female commencements in 2023 returned close to pre-pandemic levels in this female-dominated sector.

Students with disability

Aboriginal and/or Torres Strait Islander

Females

Low SES

Regional/remote

Language other than English

Apprentices and trainees

····○···· Commencements ──●── Completions

State shortage increased notably in 2023 compared to 2021.

VET occupation shortage

	2021	2022	2023
State shortage	16	25	26
Region-specific shortage	0	0	0
No shortage	35	29	28

■ No shortage ▣ Region-specific shortage ☐ State shortage

*NCVER, 2024, Total VET students and courses: program enrolments and completions, 2019–2023, State of residence: NSW; NCVER, 2024, Government-funded students and courses: program enrolments and completions, 2019–2023, State of residence: NSW
There were 22 occupations mapped for this critical skills area by ANZSCO-4digit. These occupations are mapped to full qualifications. Completion numbers are based on students who successfully completed in the relevant year and do not follow students who commenced in that year.
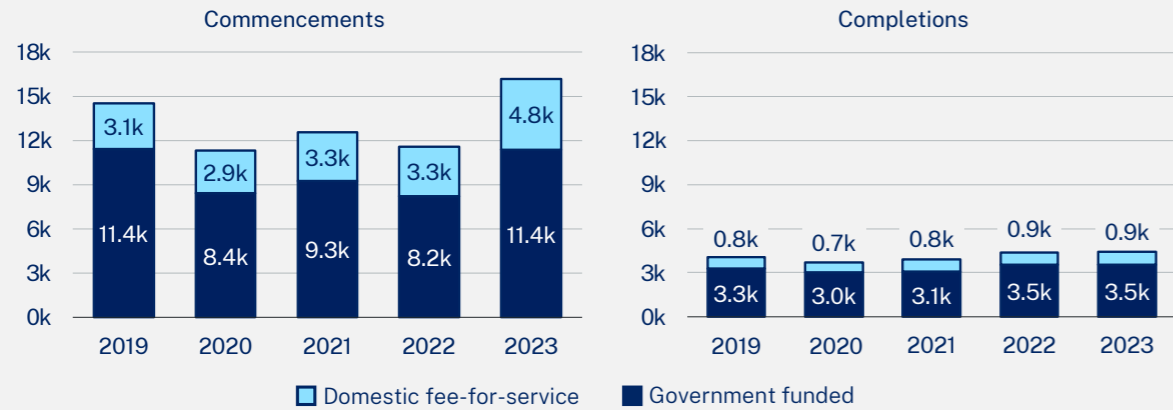
Agriculture and agrifood

The agriculture, fisheries, and forestry sectors face evolving opportunities and challenges that will shape how products are grown, harvested and sold. To ensure food security and sustainability, the workforce must continuously enhance its skills and adapt practices for a more resilient, sustainable and productive future in NSW.
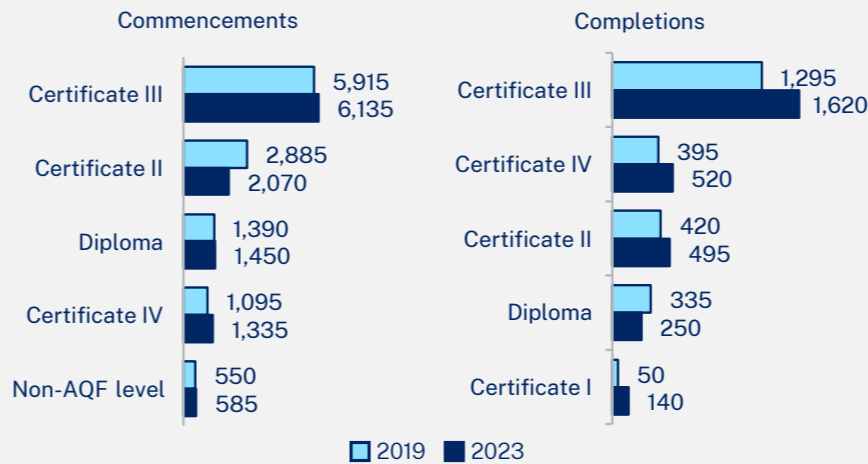
Student commencements in agriculture and agrifood qualifications grew following dips during the pandemic. Completions generally increased at the same time.

Training activity by funding type (2019–2023)*

Commencements

Year	Domestic fee-for-service	Government funded
2019	3.1k	11.4k
2020	2.9k	8.4k
2021	3.3k	9.3k
2022	3.3k	8.2k
2023	4.8k	11.4k

Completions

Year	Domestic fee-for-service	Government funded
2019	0.8k	3.3k
2020	0.7k	3.0k
2021	0.8k	3.1k
2022	0.9k	3.5k
2023	0.9k	3.5k

□ Domestic fee-for-service   ■ Government funded

Most agriculture and agrifood training activity occurred at the Certificate III level, with both commencements and completions increasing between 2019 and 2023.

Commencements

Level	2019	2023
Certificate III	5,915	6,135
Certificate II	2,885	2,070
Diploma	1,390	1,450
Certificate IV	1,095	1,335
Non-AQF level	550	585

Completions

Level	2019	2023
Certificate III	1,295	1,620
Certificate IV	395	520
Certificate II	420	495
Diploma	335	250
Certificate I	50	140

□ 2019   ■ 2023

In 2023, TAFE had the highest share of both commencements and completions, followed by other providers and private providers.

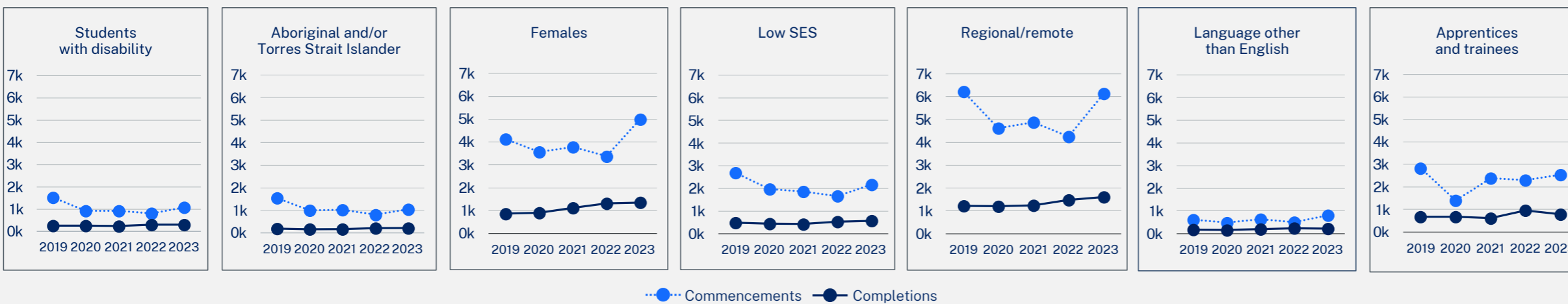### Share of training activity by provider type in 2023

Providers	Commencements	Completions
TAFE	68%	74%
Private	10%	11%
Other providers	22%	15%

Note:
Other providers refer to community providers, other government providers and other training providers.
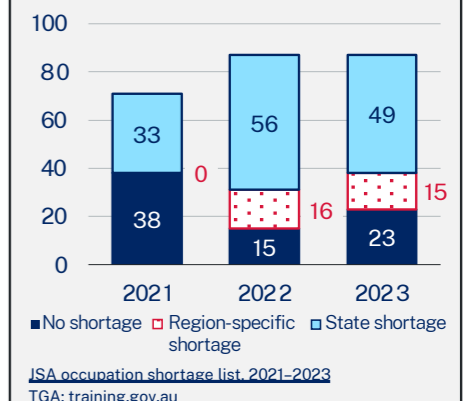
From 2019 to 2023, most priority student groups experienced declines in commencements, while female students and those speaking languages other than English saw increases. In the same period, completions improved across all student groups. Regional and remote students made up the largest priority group for agriculture and agrifood.

Students with disability

Aboriginal and/or Torres Strait Islander

Females

Low SES

Regional/remote

Language other than English

Apprentices and trainees

······ Commencements   ——— Completions

State and region-specific shortage increased significantly in 2023 compared to 2021.

VET occupation shortage

	2021	2022	2023
State shortage	33	56	49
Region-specific shortage	0	16	15
No shortage	38	15	23

■ No shortage   ▢ Region-specific shortage   ▢ State shortage

JSA occupation shortage list, 2021–2023
TGA: training.gov.au

*NCVER, 2024, Total VET students and courses: program enrolments and completions, 2019–2023, State of residence: NSW; NCVER, 2024, Government-funded students and courses: program enrolments and completions, 2019–2023, State of residence: NSW
There were 42 occupations mapped for this critical skills area by ANZSCO-4digit. These occupations are mapped to full qualifications. Completion numbers are based on students who successfully completed in the relevant year and do not follow students who commenced in that year.

Advanced manufacturing

The use of cutting-edge technology and robust business models is what separates advanced manufacturing from regular manufacturing. This industry is vital in creating high-quality employment opportunities across the state.

Student commencements in advanced manufacturing courses fluctuated throughout 2019 to 2023. Completions increased since 2020.

Training activity by funding type (2019–2023)*

Commencements

Year	Domestic fee-for-service	Government funded
2019	3.0k	12.0k
2020	2.7k	7.2k
2021	2.9k	8.6k
2022	3.4k	7.2k
2023	4.9k	9.1k

Completions

Year	Domestic fee-for-service	Government funded
2019	0.8k	3.4k
2020	0.8k	2.9k
2021	1.0k	2.9k
2022	1.4k	3.1k
2023	1.6k	3.4k

■ Domestic fee-for-service ■ Government funded

Most advanced manufacturing training activity occurred at the Certificate III level. While Certificate III commencements remained stable, completions increased substantially. All other levels saw decreases in commencements and completions.

Commencements

Level	2019	2023
Certificate III	5,110	5,165
Certificate IV	2,580	1,345
Certificate I	1,735	855
Certificate II	970	675
Diploma	1,230	505

Completions

Level	2019	2023
Certificate III	1,145	1,920
Certificate IV	850	495
Certificate II	385	260
Diploma	400	195
Certificate I	170	120

□ 2019 ■ 2023

In 2023, TAFE had the highest share of both commencements and completions. Private providers had a lower share of commencements but a higher share in completions compared to other providers.

Share of training activity by provider type in 2023

Providers	Commencements	Completions
TAFE	77%	82%
Private	10%	13%
Other providers	14%	5%

Note:
Other providers refer to community providers, other government providers and other training providers.

Female commencements and completions increased, while low socioeconomic background students and students with disability declined in both areas. Other student groups saw notable declines in commencements but growth in completions.

Charts showing Commencements and Completions (2019–2023) for: Students with disability, Aboriginal and/or Torres Strait Islander, Females, Low SES, Regional/remote, Language other than English, Apprentices and trainees.

····• Commencements   ——• Completions

State shortage increased significantly while no region-specific shortage was reported.

VET occupation shortage

Year	No shortage	Region-specific shortage	State shortage
2021	51	0	26
2022	45	0	39
2023	36	0	48

■ No shortage ☐ Region-specific shortage ☐ State shortage
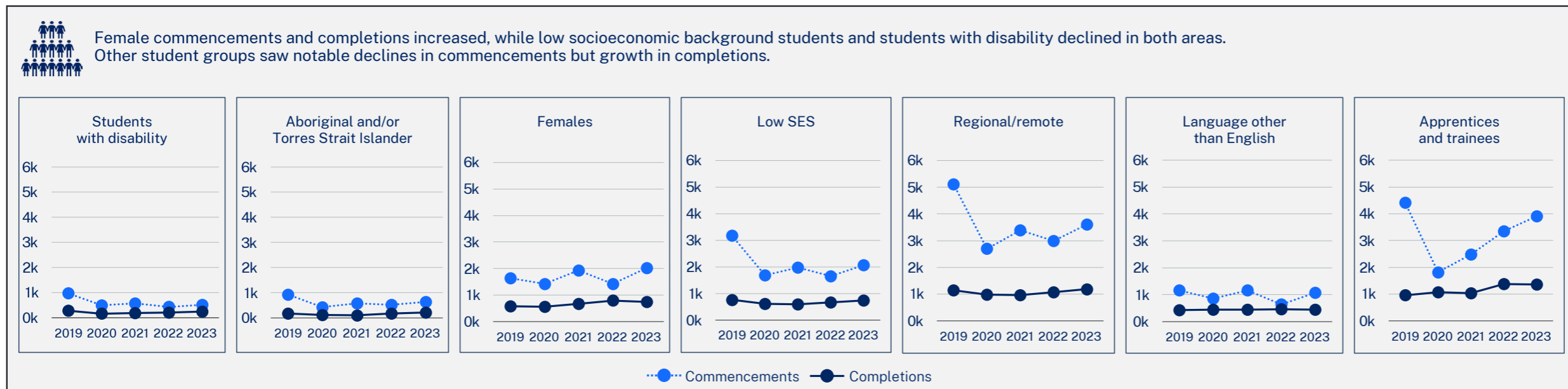
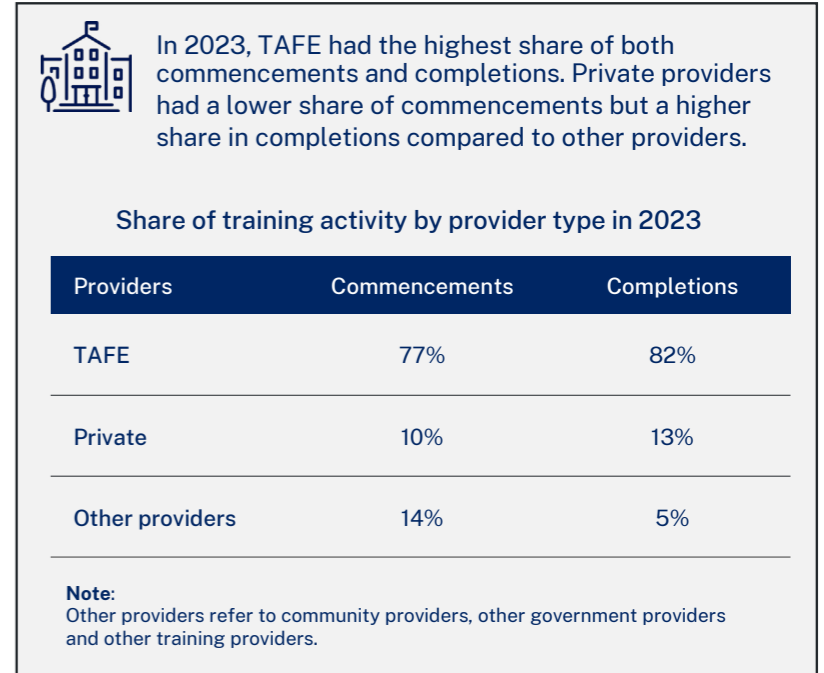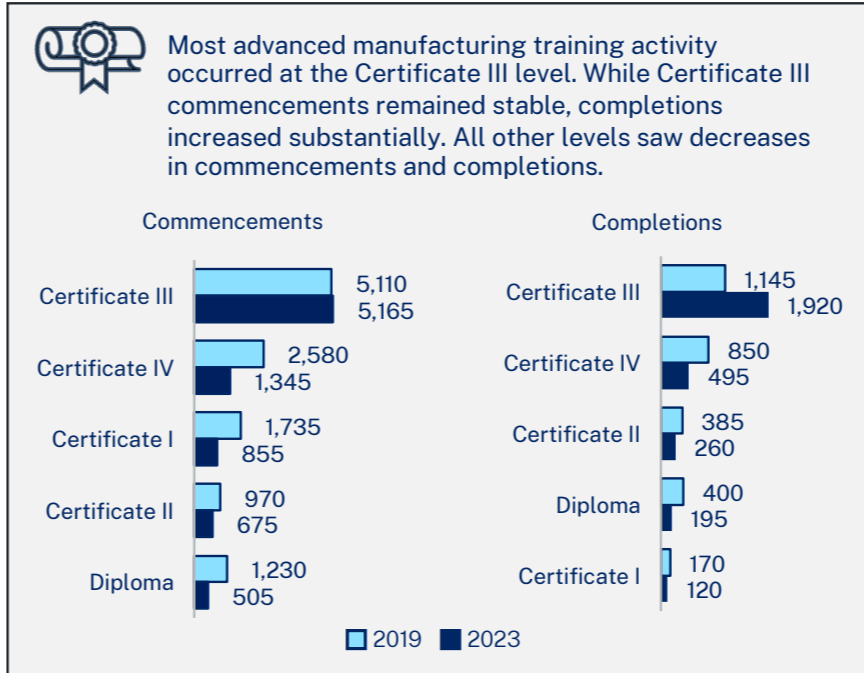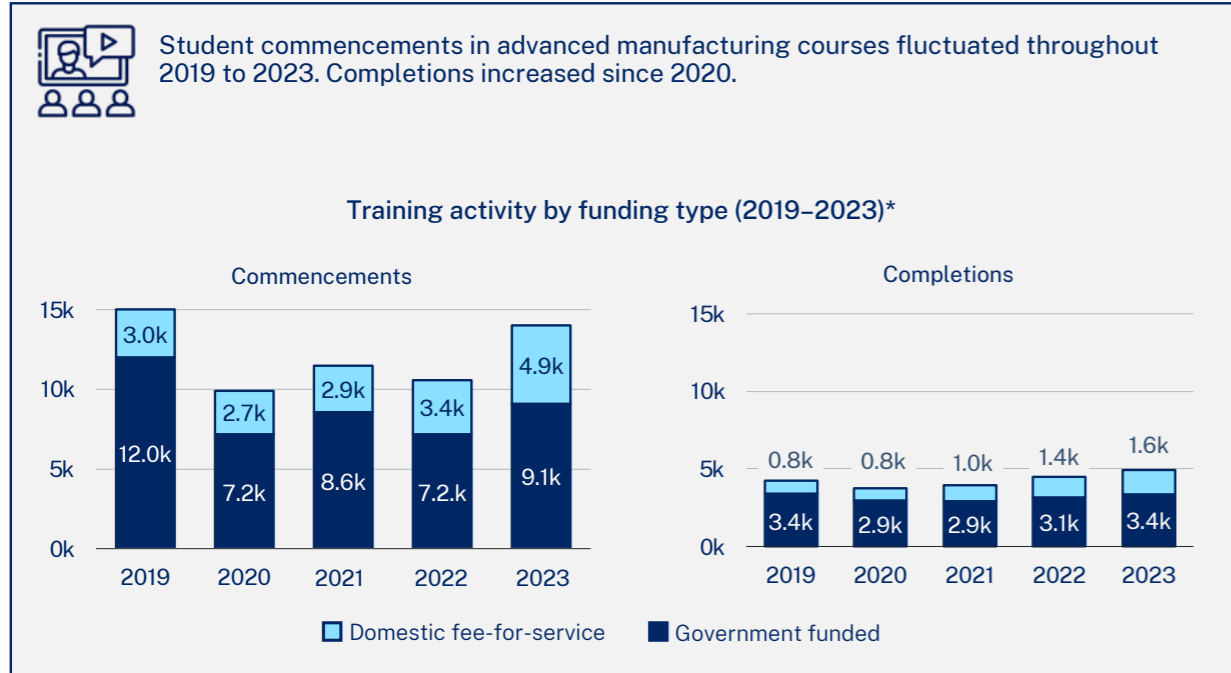JSA occupation shortage list, 2021–2023
TGA: training.gov.au

*NCVER, 2024, Total VET students and courses: program enrolments and completions, 2019–2023, State of residence: NSW; NCVER, 2024, Government-funded students and courses: program enrolments and completions, 2019–2023, State of residence: NSW
There were 33 occupations mapped for this critical skills area by ANZSCO-4digit. These occupations are mapped to full qualifications. Completion numbers are based on students who successfully completed in the relevant year and do not follow students who commenced in that year.