

# VET for Secondary School Students (VfSSS)

Student post-school employment and  
training destinations

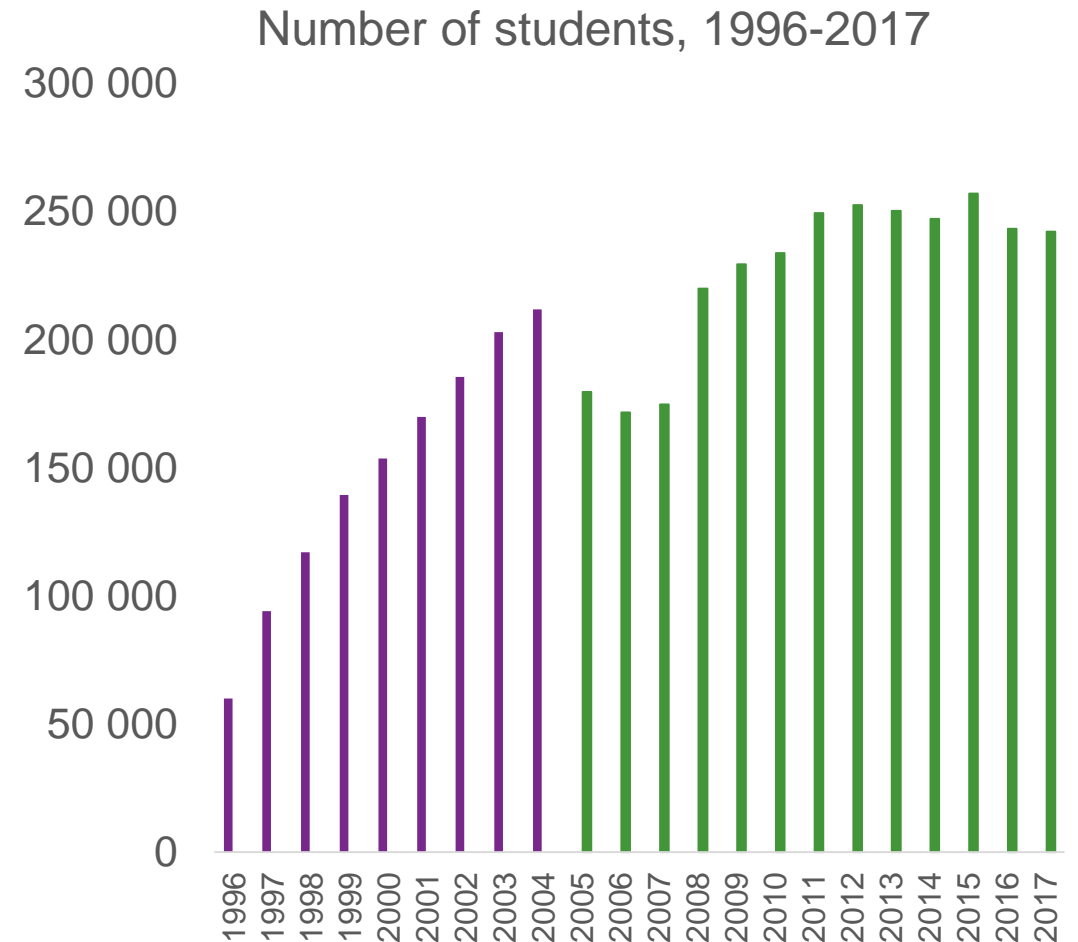
# Agenda

- Welcome
- Data on student characteristics, qualifications and participation rates
- The construction of the integrated data sets linking the National VET in Schools Collection to the Census
- What students are doing five-years down the track of their VET studies in school
- Comparisons between post-school employment and training destinations of students who did and did not do VfSSS studies using longitudinal data

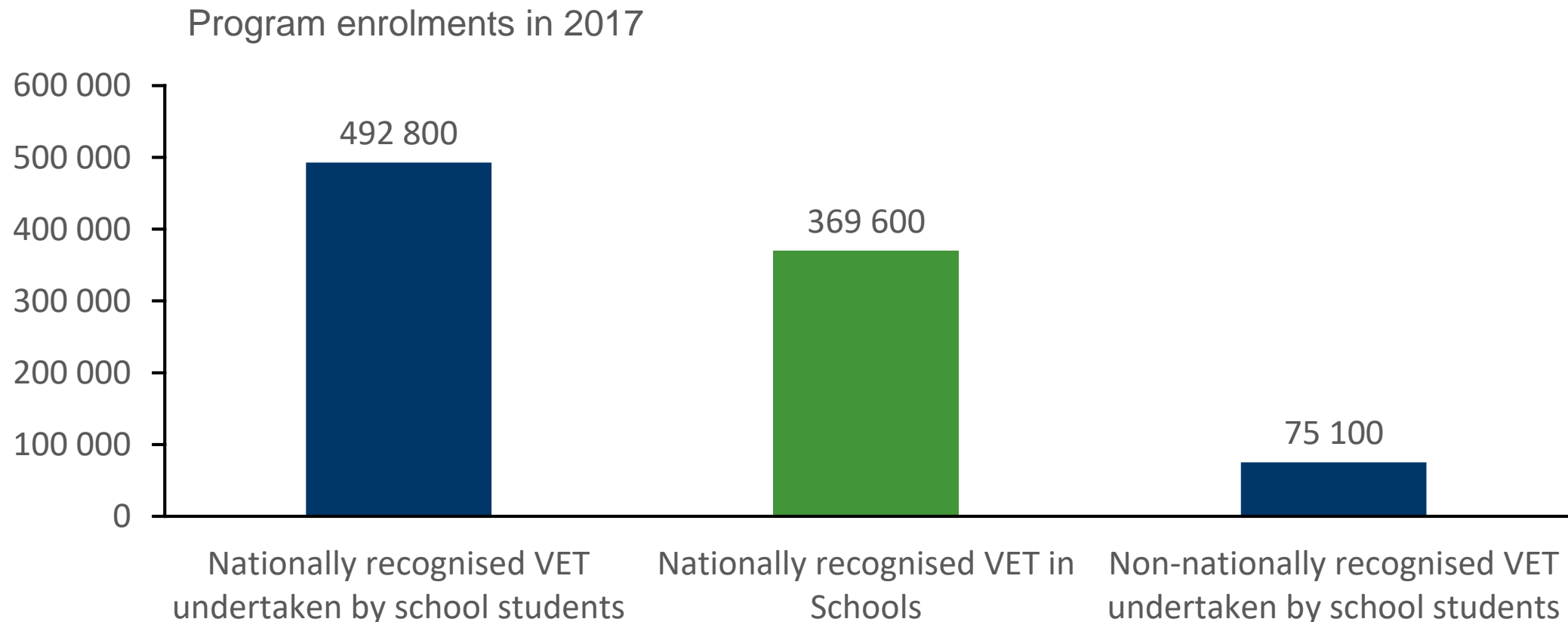


## National VET in Schools Collection

- Covers vocational education and training (VET) undertaken by school students as part of their senior secondary school certificate of education
- Does not cover VET undertaken in school not counted towards their certificate or VET undertaken outside of school

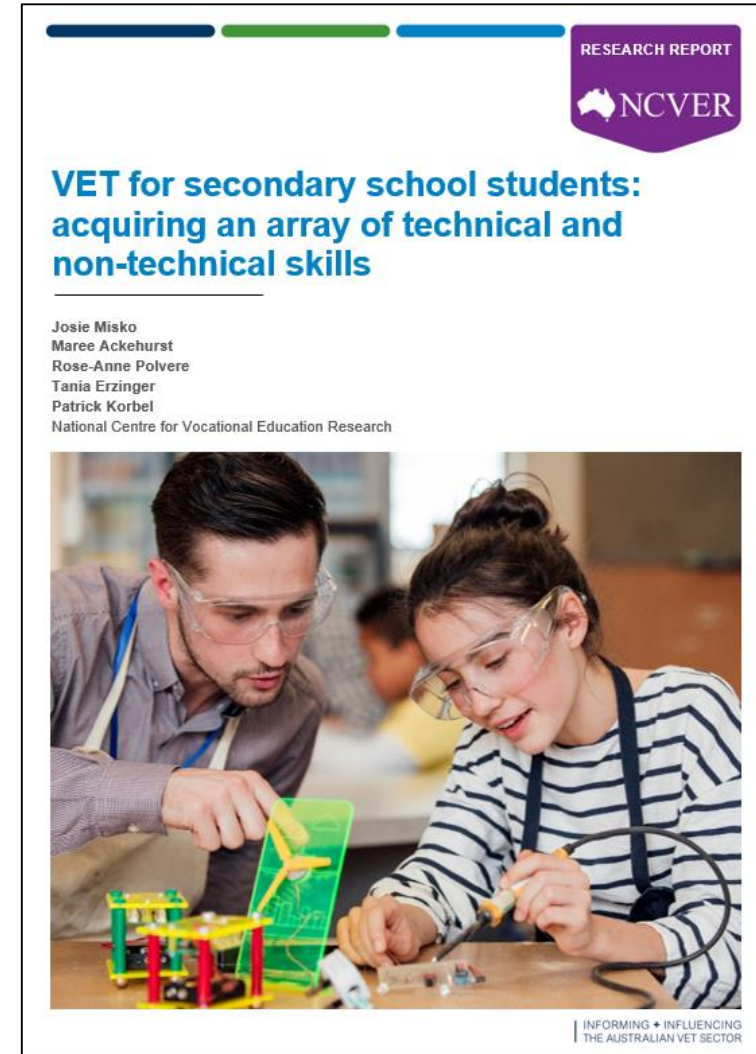


# VET for secondary school students is more than the VET in Schools Collection



# VET for secondary school students: acquiring an array of technical and non- technical skills

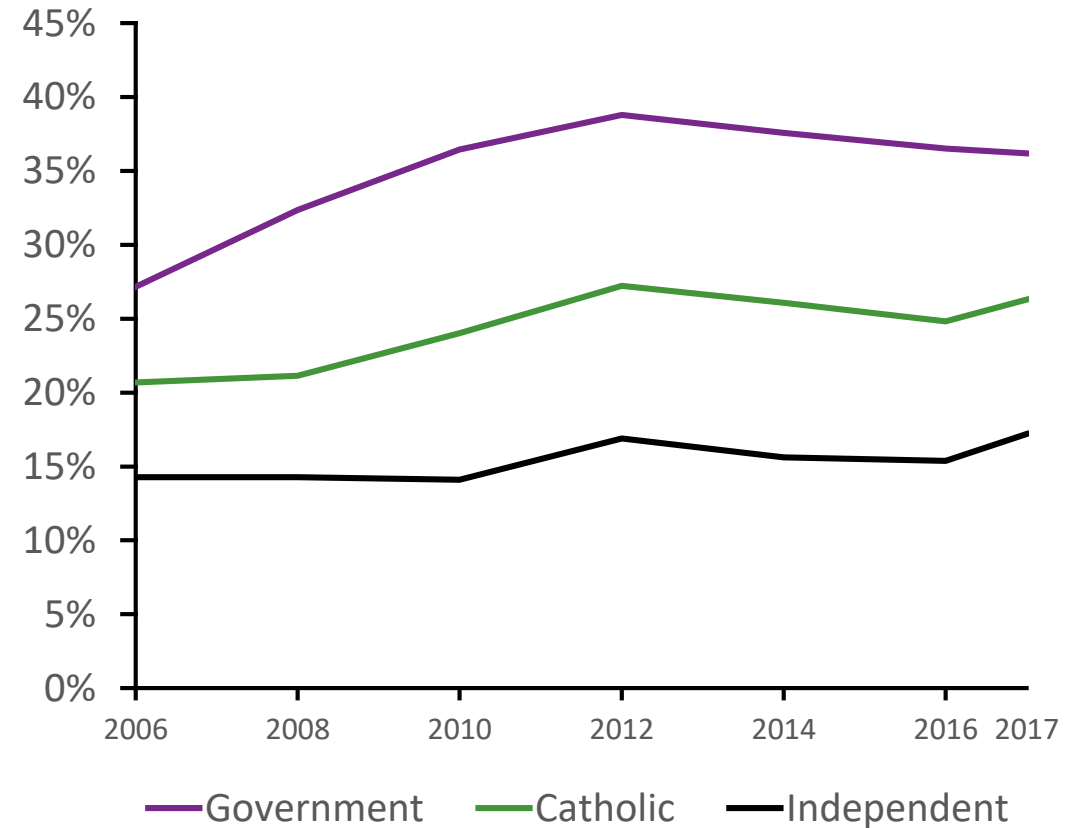
Josie Misko, Maree Ackehurst, Rose-Anne Polvere, Tania Erzinger and Patrick Korbel



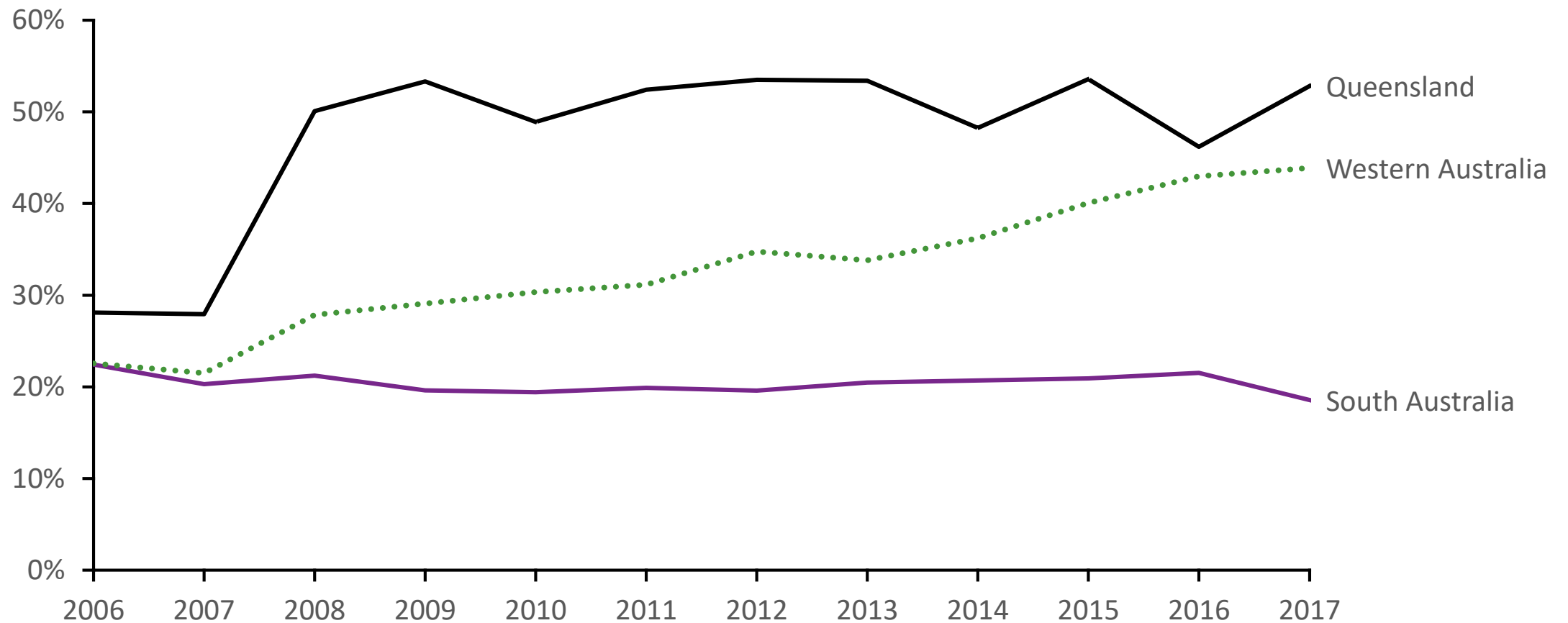
## Participation rates, overall and by school sector, 2006-2017

	Participation rate (%)
2006	24.0
2007	24.1
2008	30.0
2009	30.7
2010	30.6
2011	32.4
2012	33.2
2013	32.6
2014	31.9
2015	32.5
2016	30.6
2017	31.1

**Indigenous students:**  
42% participation rate in 2017

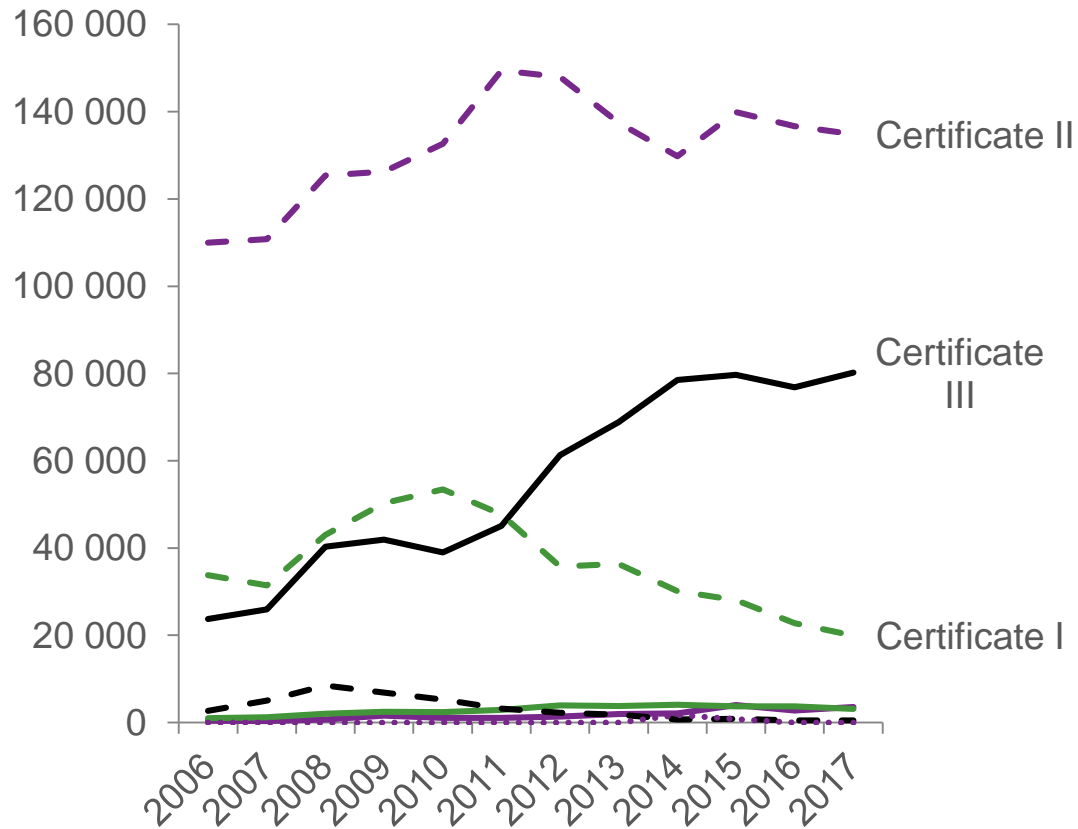


# Participation rates by jurisdiction, 2006-17



Source: Misko, Ackehurt, Polvere, Erzinger & Korbel (2019)

# Qualification levels, 2006-2017



Enrolments in Cert. III qualifications by sex





## Most popular qualifications, 2017

Qualification	Number of students
Certificate II in Hospitality	14 684
Certificate II in Business	13 190
Certificate II in Kitchen Operations	11 561
Certificate III in Sport and Recreation	9 855
Certificate II in Construction Pathways	8 495

Source: Misko, Ackehurt, Polvere, Erzinger & Korbel (2019)

# School-based apprentices and trainees by states and territories, 2006 and 2017 (%)

State and territory	2006	2017
New South Wales	3.2	5.0
Victoria	<b>14.4</b>	6.0
Queensland	9.7	13.4
South Australia	4.7	9.0
Western Australia	4.4	3.5
Tasmania	4.7	<b>15.7</b>
Northern Territory	7.1	5.0
Australian Capital Territory	1.5	5.8
Australia	7.5	8.2

Percentage within the jurisdiction that are apprentices or trainees

### Most common in the

- Retail Services
- Tourism, Travel and Hospitality
- Business Services

### Training Packages.

# Five years down the track of VfSSS studies

## Datasets:

- Integrated data set A
  - NCVET VET in Schools Collection 2011
  - ABS Census of Population and Housing 2016
- Integrated data set B
  - NCVET VET in Schools Collection 2006
  - ABS Census of Population and Housing 2011
- Longitudinal Surveys of Australian Youth (LSAY)

## Focus on:

- Employment and occupational destinations
- Further education and training destinations
- Alignment between VfSSS studies and destinations

## Data linkage - overview

- VET in Schools data
  - 250 000 students undertaking VET in Schools in 2011
  - Data items on demographics and training activity
- Census of Population and Housing:
  - 23 400 000 Australian residents on 9 August 2016
  - Data items on demographics, education and employment
- Cross-section snapshot of two points in time
- Relatively low match rate (~67%) compared to other linkages

## Data linkage - details

### Missing information in the original datasets

Linking variable	Missing or not stated	
	VETiS 2011	Census 2016
Age	0%	
Date of birth	0%	23%
Country of birth	45%	7%
Language	27%	
Language spoken	30%	6%
Sex	0%	0%
Statistical Area Level 2	4%	0%

### Linkage stages

	N	%
Stage 1	44 984	17.9
Stage 2	65 724	26.2
Stage 3	57 217	22.8
<b>Stages 1 + 2</b>	<b>110 708</b>	<b>44.1</b>

## Employment and training destinations

	2011 cohort (as in 2016)		2006 cohort (as in 2011)	2011 cohort (as in 2016)
<b>Employment status</b>	%	<b>Year 12 attainment status</b>	%	%
Employed	78	Lower than Year 12	13	6
Not employed	22	Year 12 or higher	87	94
<b>Study and employment status</b>				
Not working and not studying	13			
Combining work with studies	24			
Studying only	10			
Working only	54			
<b>Occupation (of those currently working)</b>				
Trade	22			
Non-trade	78			

Source: 2011 National VET in Schools Collection and 2016 Census of Population and Housing Integrated Data Set; 2006 National VET in Schools Collection and 2011 Census of Population and Housing Integrated Data Set.

## Students employed by sex and study background

Student characteristics and background	2006 cohort (as in 2011)	2011 cohort (as in 2016)
	%	%
Males	80	78
Females	77	77
Cert. I/II studies	79	77
Cert. III/IV studies	80	79
Diploma and above studies	85	79
Did an apprenticeship or traineeship	83	84
Did not do an apprenticeship or traineeship	79	77

## Students employed by characteristics

	2011 cohort (as in 2016)
	%
English	79
Language other than English	66
Government sector	77
Catholic sector	82
Independent sector	80
Other government sector	69

	2011 cohort (as in 2016)
	%
Non-Indigenous	78
Indigenous	66
Major city	77
Inner regional	79
Outer regional	78
Remote and rural	76



# Training destinations

	2006 cohort (as in 2011)	2011 cohort (as in 2016)
<b>Highest post-school qualification</b>	%	%
Bachelor degree or higher	18	17
VET diploma	18	18
Certificate III/IV	54	57
Certificate 1/II	10	8
<b>Current institution of further studies</b>		
University	21	25
VET	9	8
Not in studies	70	67

## Income earned by qualification level, 2011 cohort

- Very low wage earners  
– (\$33,799 and below)
- Low wage earners  
– (\$33, 800 to \$41, 599)
- Middle income earners  
– (41,600 - \$77,999)
- High flyers  
– (\$78 000 and above)

	Very low wage earners	Low wage earners	Middle income earners	High flyers
<b>Level of VfSSS qualification</b>	%	%	%	%
Cert. I/II	22	32	45	4
Cert. III/IV	18	29	49	4
Diploma and higher	20	27	47	5
<b>Level of highest non-school qualification</b>				
Cert. I/II	23	32	42	3
Cert. III/IV	17	29	49	6
Diploma	16	31	50	3
Bachelor's degree and higher	10	17	68	5

## Link between trades-related VfSSS and occupation, 2011 cohort

Intended occupation of qualification (2-digit ANZSCO)	Employed in the intended occupation	Employed in another trade occupation	Employed in a non- trade occupation	Total
	%	%	%	%
Engineering, ICT and Science technicians	7	19	74	100
Automotive and Engineering trades workers	42	13	45	100
Construction Trades	43	17	40	100
Electrotechnology and telecommunications	53	16	31	100
Food trades workers	34	8	58	100
Skilled animal and horticultural workers	15	6	79	100
Other technicians and trade workers	7	17	77	100

## Linking intended qualification of occupation with occupation of employment, 2011 cohort (%)

Intended occupation of VfSS qualification (ANZSCO-3 sub-major group)	Employed in same sub-major group occupation	Not employed in same sub-major group occupation	Total
Electrotechnology and Telecommunications Trades Workers	52.5	47.5	100
Sales Assistants and Salespersons	45.1	54.9	100
Construction Trades Workers	42.7	57.3	100
Automotive and Engineering Trades Workers	41.8	58.2	100
Food Trades Workers	33.7	66.3	100
Carers and Aides	32.9	67.1	100
Skilled Animal and Horticultural Workers	15.1	84.9	100
Farmers and Farm Managers	14.4	85.6	100
Hospitality Workers	13.9	86.1	100
Sales Representatives and Agents	13.2	86.8	100
Farm, Forestry and Garden Workers	10.7	89.3	100
Food Preparation Assistants	9.8	90.2	100
Construction and Mining Labourers	9.4	90.6	100
Health and Welfare Support Workers	8.2	91.9	100
General Clerical Workers	8.0	92.0	100

## Intended occupation of qualification and occupation of employment for apprentices or trainees, 2011 cohort (%)

Sub-major occupation of intended occupation	Apprenticeship or traineeship	Not apprenticeship or traineeship	Sig. difference (.05%)*
Electrotechnology and Telecommunications Trades Workers	66.9	45.5	*
Construction Trades Workers	64.1	37.3	*
Automotive and Engineering Trades Workers	61.8	35.1	*
Food Trades Workers	45.6	18.1	*
Sales Assistants and Salespersons	45.6	44.9	No statistical sig. difference
Carers and Aides	45.4	31.5	*
Skilled Animal and Horticultural Workers	30.7	13.4	*
Other Technicians and Trades Workers	30.6	4.3	*
Hospitality Workers	18.6	13.5	*
Farm, Forestry and Garden Workers	14.2	10.4	No statistical sig. difference
General Clerical Workers	13.6	7.7	*
Construction and Mining Labourers	12.5	9.4	No statistical sig. difference
Engineering, ICT and Science Technicians	11.4	6.4	*
Sports and Personal Service Workers	10.7	7.0	*

# Attained a post-school qualification or currently involved in further studies

Student background	2006 cohort (as in 2011)	2011 cohort (as in 2016)
<b>Language mainly spoken in the home</b>	%	%
English	60	69
Language other than English	69	74
<b>School sector</b>		
Government School	58	68
Catholic School	69	75
Independent School	74	79
Other government	59	70
<b>Indigenous status</b>		
Non-Indigenous	62	71
Indigenous	39	58

## Post-school qualifications by field of education of VfSSS studies, 2011 cohort

Field of education	Post-school qualification in same field (%)
Natural and physical sciences	25
Information technology	40
Engineering and related technologies	55
Architecture and building	48
Agriculture, environmental and related studies	33
Health	41
Education	-
Management and commerce	33
Society and culture	43
Creative arts	34
Food, hospitality and personal services	32
Mixed field programmes	-

## Post-school qualifications by field of education of VfSSS studies, 2011 cohort

Field of education	Obtained a bachelor degree or higher (%)
Natural and physical sciences	na
Information technology	21
Engineering and related technologies	7
Architecture and building	6
Agriculture, environmental and related studies	8
Health	18
Education	na
Management and commerce	22
Society and culture	16
Creative arts	23
Food, hospitality and personal services	20
Mixed field programmes	14



## Longitudinal Surveys of Australian Youth

- Nationally representative survey of Australian youth aged 15-25 year-old.
- Collects information on school, post-school education and training, employment, life satisfaction and many more.
- Cohort of year 2009 (Y09).



Longitudinal Surveys of Australian Youth – LSAY (@LSAY15)



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## Exploratory study: Comparisons of employment outcomes between VfSSS students and non-VfSSS students

	Did not do VfSSS	Did VfSSS	Total		Significance at 95% confidence interval
	%	%	%	<i>n</i>	
Full-time employment	36.9	54.2	42.7	1593	*
Part-time employment	42.5	28.4	37.8	1596	*
Not working (unemployed or NILF)	16.0	13.4	15.1	622	
Working, but working time unknown	4.6	4.0	4.4	155	
	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>		
Permanent/ongoing employment	45.8	55.5	49.1	1862	*
Casual employment	34.8	26.4	32.0	1320	*

## Exploratory study: Comparisons of occupations of employment by VfSSS studies

	Did not do VfSSS	Did VfSSS	Total	n	Significance test at 5% level
	%	%	%	n	
Managers	3.7	9.3	5.6	184	*
Professionals	20.7	7.6	16.3	768	*
Technicians and trades workers	7.7	18.1	11.2	368	*
Community and personal service workers	18.0	16.1	17.3	650	
Clerical and administrative workers	10.4	10.5	10.4	463	
Sales workers	13.5	10.4	12.4	510	
Machinery operators and drivers	1.5	3.0	2.0	68	
Labourers	5.5	8.8	6.6	221	
Unknown or not classifiable	3.1	2.7	3.0	112	
Not working (unemployed or NILF)	16.0	13.4	15.1	622	
<b>Total (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>3966</b>	

## Exploratory analysis of ANZSCO sub-major group occupational outcomes by VfSSS and non-VfSSS studies

- VfSSS students more likely than non-VfSSS students to become:
  - sales representatives and agents
  - hospitality, retail and service managers, and
  - construction trades workers
- Non-VfSSS students more likely than VfSSS students to become professionals:
  - legal, social and welfare professionals
  - health professionals
  - education professionals, and
  - business, human resources and marketing professionals,

## Educational outcomes: VfSSS vs non-VfSSS

	Did not do VfSSS	Did VfSSS	Total		Sig. at 95% confidence interval
	%	%	%	n	
Completed Year 12	95.1	87.9	92.7	3734	*
Did not complete Year 12	4.9	12.1	7.3	232	*
Currently undertaking a recognised qualification	46.6	27.4	40.2	1811	*
Not currently undertaking a recognised qualification	53.4	72.6	59.8	2155	*
Completed an apprenticeship or traineeship	7.9	21.4	12.4	363	*
Commenced an apprenticeship or traineeship, but did not complete	2.6	7.0	4.1	105	*
Never commenced an apprenticeship or traineeship	86.1	68.2	80.1	3389	*
Completed studies in VET	23.6	47.8	31.7	938	*
Never commenced studies in VET	66.2	39.5	57.2	2621	*

## Bachelor's degree or higher qualifications, by VfSSS studies (%)

	Did not do VfSSS	Did VfSSS	Total		Sig. at 95% CI
	%	%	%	n	
Currently undertaking	29.4	15.0	24.6	1144	*
Completed	28.3	12.9	23.2	1053	*
Completed and undertaking further study	7.8	1.4	5.7	310	*
Commenced but did not complete	9.0	8.5	8.8	370	
Never commenced	25.4	62.2	37.8	1089	*

## Highest qualification completed

	Did not do VfSSS	Did VfSSS	Total		Sig. at 95% CI
	%	%	%	n	
Certificate I and II (includes unknown certificate level)	3.3	8.8	5.1	147	*
Certificate III and IV	10.5	28.9	16.7	492	*
Advanced diploma/diploma (incl. associate degree)	7.9	9.5	8.4	243	
Bachelor's degree or higher	36.2	14.3	28.8	1363	*
Did not complete a qualification	42.2	38.5	40.9	1721	
<b>Total (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>3966</b>	

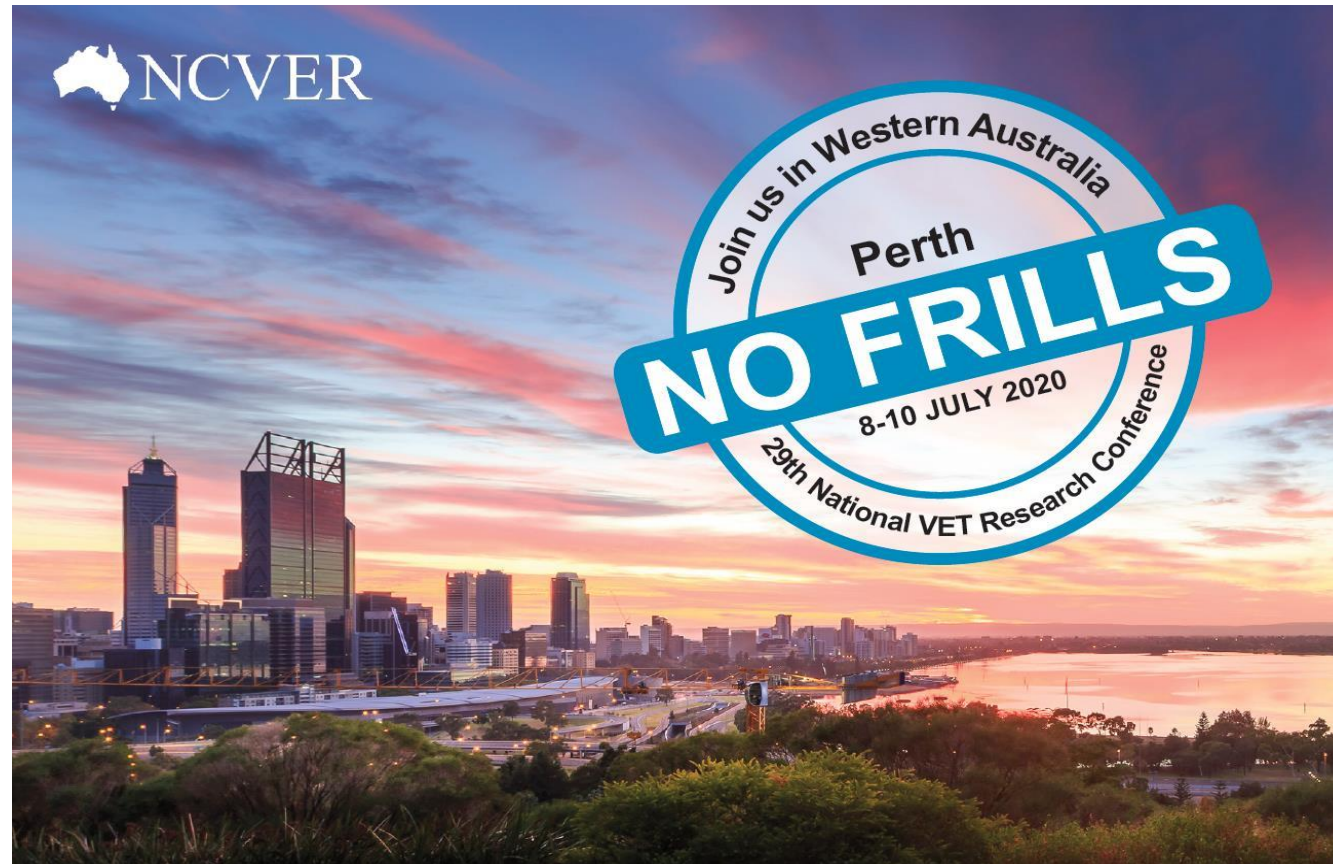
- Around 80% of students doing VfSSS are employed five years down the track of their VfSSS programs
- VfSSS students are more likely than non-VfSSS students to be in full-time employment
- VfSSS can cater for two groups of students those bound for vocational and industry pathways and those interested in more academic pathways
- There is strong alignment between:
  - trades-related VfSSS studies and post-school employment destinations and occupations
  - participation in apprenticeships and traineeships at school and post-school employment and occupational destinations
- Strengthening VfSSS makes good sense



## More information

- Misko J, Chew E, Korbelt P (forthcoming), *VET for secondary school students: post-school employment and further training destinations*, NCVER, Adelaide.
- Misko, J, Korbelt, P & Blomberg, D 2017, *VET in Schools students: characteristics and post-school employment and training experiences*, NCVER, Adelaide
- Misko, J, Ackehurst, M, Polvere, RA, Erzinger, T & Korbelt, P 2019, *VET for secondary school students: acquiring an array of technical and non-technical skills*, NCVER, Adelaide.

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