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# Choosing VET: enabling conditions to VET pathways

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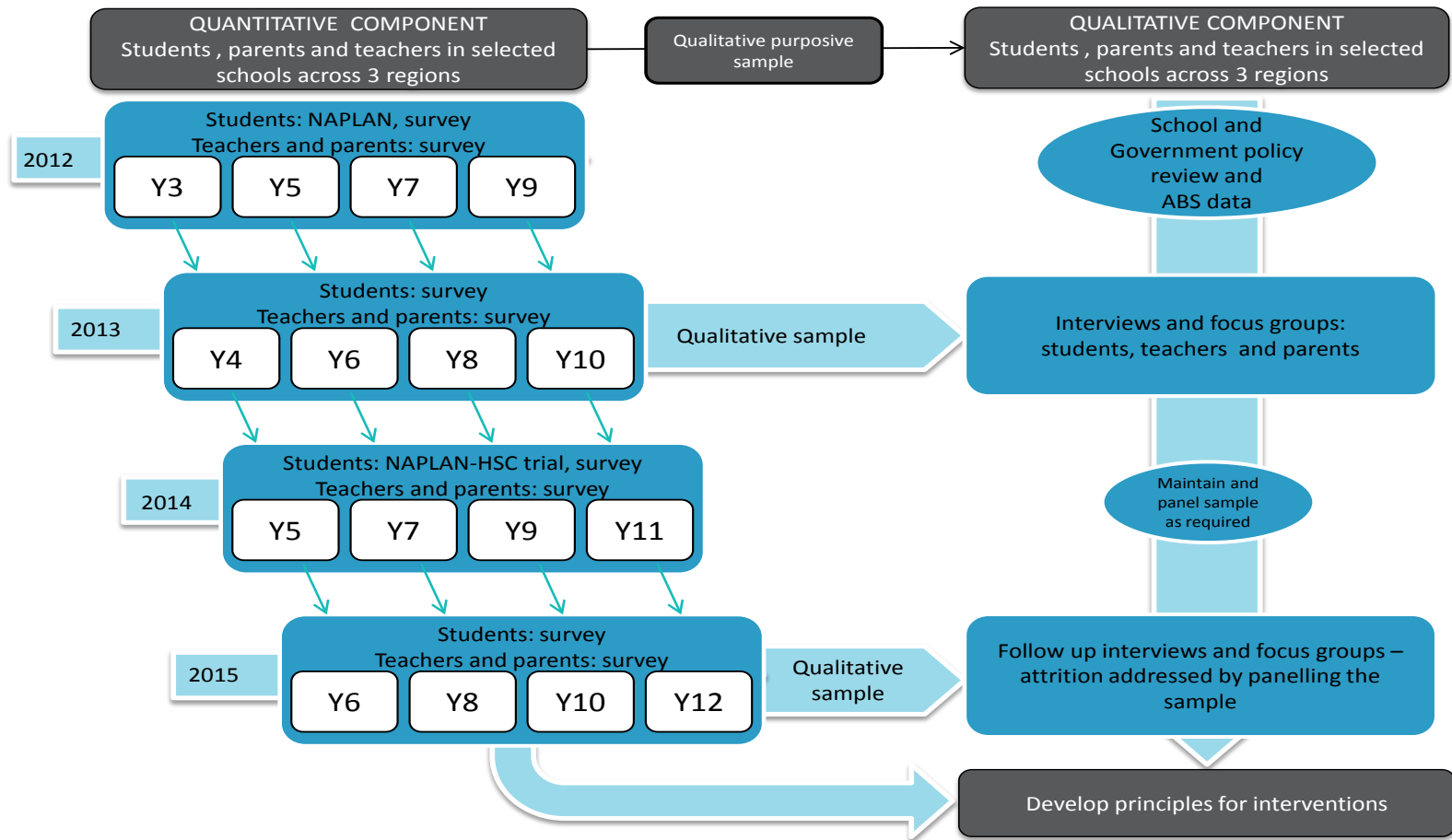
AVETRA 19th Annual Conference | TAFE Northern Sydney, Gore Hill Campus, St Leonards  
22 April 2016 | 10:05-10:35

# Background

- Australian tertiary education sector characterised by churn
- TAFE enrolments decreasing and turmoil in the RTO sector
- Traditional distinction between VET (for hands-on jobs) and university (theory-based jobs) changing
- VET courses shifting from 50:50 theory and practical toward 80:20 in favour of theory – parallels the transition from the Industrial to the Information Age
- Skills shortages predicted in vocational occupations

In this context, drawing on data from the recent *Aspirations Longitudinal Study*, understanding who is choosing VET pathways and why is increasingly important. Here we consider the question of *who is choosing VET pathways?*

# Methodology



# Aspirations Longitudinal Study - Sample



**2012 – 2015 surveys completed**

n = 10,543 students  
1,362 parents  
1,341 teachers  
64 schools of all types

**2013 and 2014 focus group data**

200 focus groups in 30 schools  
567 students  
59 parents and carers  
152 teachers and principals

# Occupational and educational aspiration measures

- The Australian and New Zealand Standard Classification of Occupations (ANZSCO) is used to code the students' indicated job choices. Syntax from [ACER](#) converts these codes into an occupational prestige scale from 0 to 100 based on the Australian Socioeconomic Index 2006 (AUSEI06).
- The relationship between occupational prestige and educational level generally held by people working in this range is represented in the table below – see [ABS](#) for detail.

Occupational prestige (AUSEI06)						
Range	0 to 34.9		35 to 60		63.6 to 100	
Occupations across this range	Livestock worker	4.9	Veterinary nurse	37.0	Librarian	81.3
	Cook	17.7	Beauty therapist	49.6	Teacher	85.3
	Aged & disabled carer	34.9	Welfare support	58.9	Surgeon	100.0
Associated education & ANZSCO skill level	High School/Cert 1 Skill level 5		TAFE/VET Cert Skill level 2-4		University Skill level 1	

# Variables

The analysis is anchored in the survey responses and other linked data for these students, considering variables such as:

- Prior achievement – NAPLAN results from 2012 or 2014, quartiles
- Socioeconomic status, quartiles
- Sex (M/F)
- Aboriginal status (Indigenous/non-Indigenous)
- Students' level of schooling (primary, lower secondary, upper secondary [Ys10-12])
- Geographic location – metropolitan/provincial
- Barriers to educational/career pathways (financial and travel barriers), count from 0-4
- Enabling conditions for educational/career pathways (cultural capital), quartiles
- Occupation prestige, a scale of 0-100

# ANZSCO skill levels

**Skill level 1** Bachelor Degree or higher qualification

**Skill level 2** Associate Degree, Advanced Diploma or Diploma

**Skill level 3** AQF Certificate IV or AQF Certificate III

**Skill level 4** AQF Certificate II or III

**Skill level 5** AQF Certificate I or compulsory secondary education



# Classification of outcome variable

Skill level 1      University Pathway to chosen career(s)

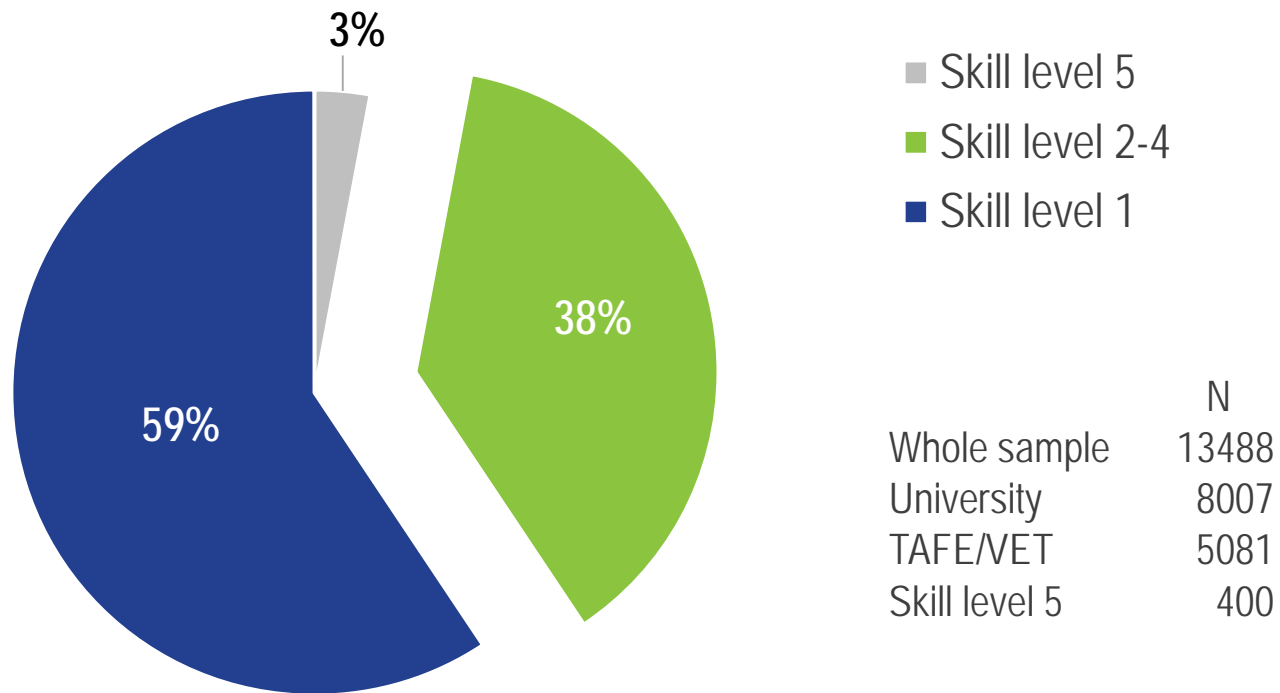
Skill level 2

Skill level 3      TAFE/VET pathway to chosen career(s)

Skill level 4

(Skill level 5 AQF Certificate I or compulsory secondary education)

# Career choice and associated skill/education level



The whole sample here is from the total number of jobs identified by students, repeated measures are not accounted for in this analysis.

# Chi-square Automatic Interaction Detector (CHAID)

Using decision trees to understand how University and VET pathways can be segmented into clusters to assist understanding

## Analysis 1 – All students

Dependent variable	University or VET education pathway
Independent variables	Aboriginal status, Geographic location, Primary/lower secondary/upper secondary NAPLAN quartiles, SES quartiles, Sex

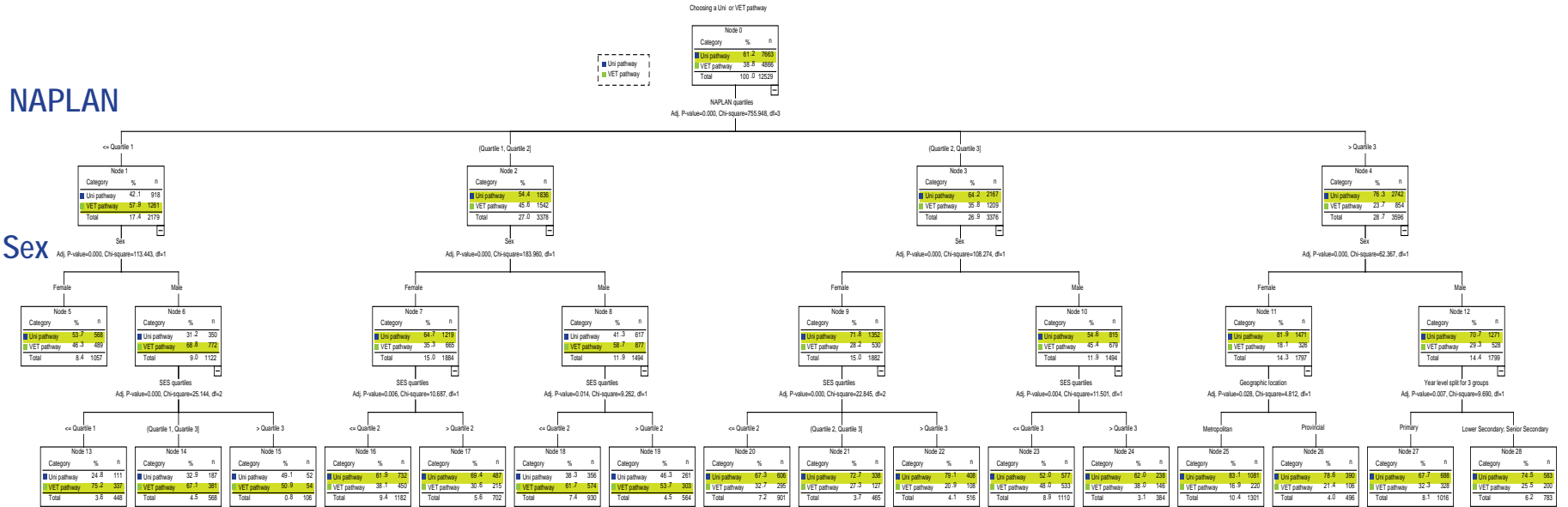
## Analysis 2 – Secondary students only

Dependent variable	University or VET education pathway
Independent variable	Travel and Financial Barriers and Cultural capital

# CHAID Analysis 1 – all students & demographics

NAPLAN

Sex



SES

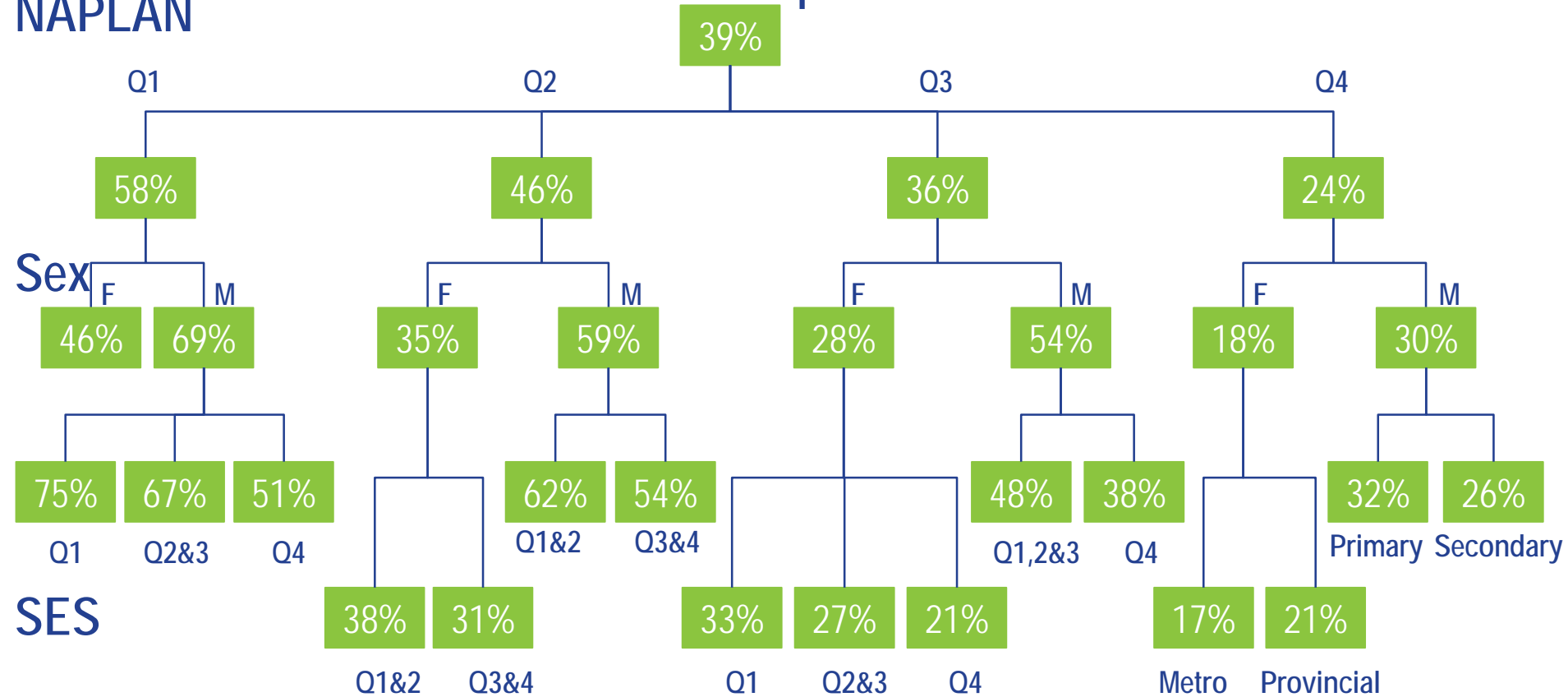
Metro/  
Provincial

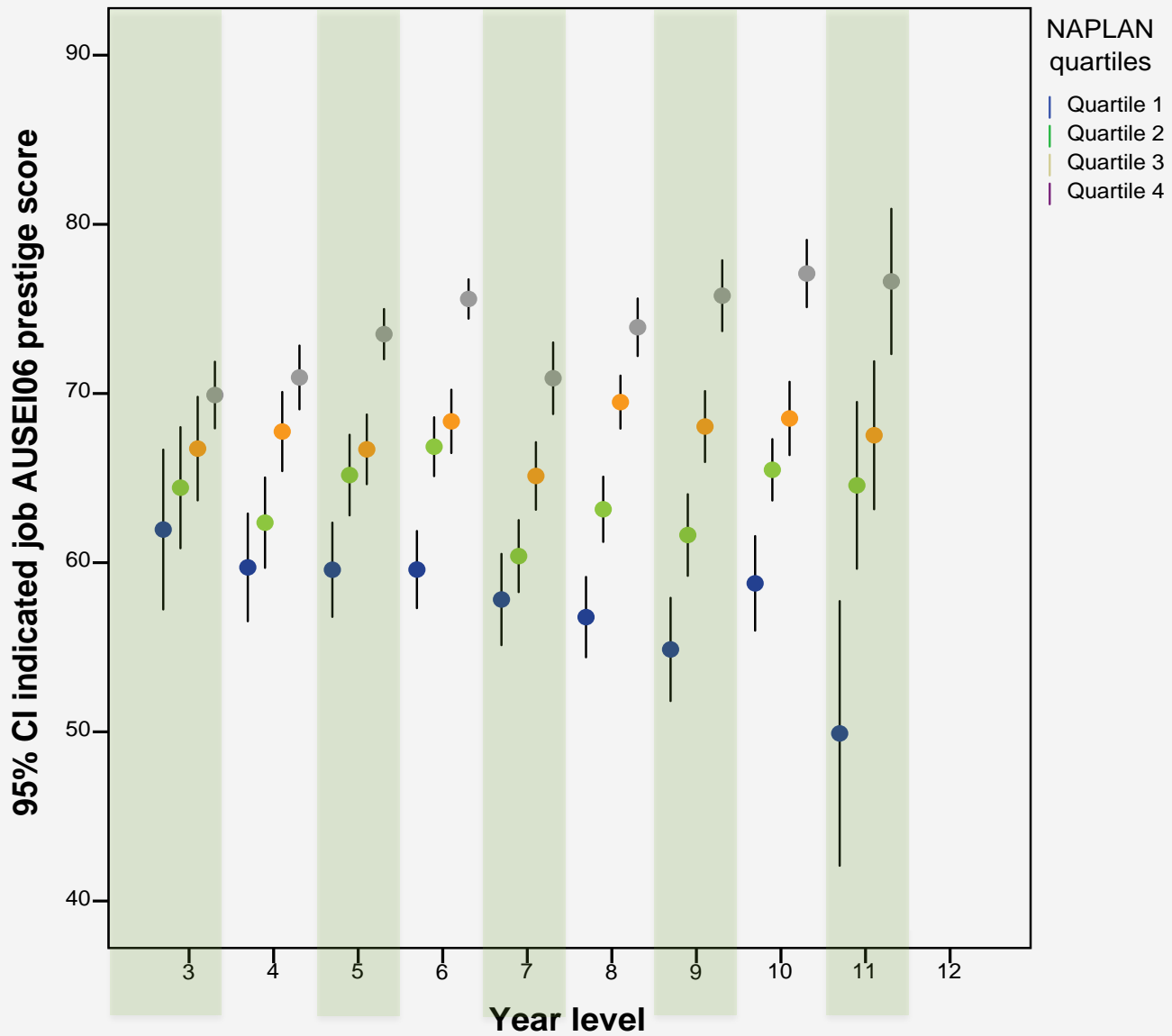
Primary/  
Secondary

# CHAID Analysis 1 – all students & demographics

## VET career path

NAPLAN





# CHAID Analysis 2 – Secondary students

## Cultural capital

- Listen to classical music
- Talk about music
- Go to art galleries or museums
- Go to the theatre to see a play, dance or opera performance
- Go to the cinema to watch a movie
- Go to a library
- Talk about books
- Play a musical instrument or sing
- Participate in dancing, gymnastics or yoga
- Talk about art

## Barriers

- I would have to travel too much to study at TAFE or university
- I would have to move away from home to study at TAFE or university
- There is no appropriate public transport or other way of getting to TAFE/UNI
- Public transport would be unaffordable
- There would be too much financial pressure on my family
- I will need to qualify for Youth Allowance to support my study

# CHAID Analysis 2 – Secondary students

Cultural capital

Listen to classical music  
Talk about music  
Go to art galleries or museums  
Go to the theatre to see a play, dance or opera performance  
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Go to a library  
Talk about books  
Play a musical instrument or sing  
Participate in dancing, gymnastics or yoga  
Talk about art

**No statistically significant effects**

Barriers

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# Factors

Analysis of these variables for factors that influence students' career/educational pathway showed that they clustered, at various levels, to provide helpful information about the pathways students are considering for their educational and career futures:

- Prior achievement – NAPLAN results from 2012 or 2014, quartiles
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# THANK YOU

## Questions and discussion

### Connect with us!

w: [www.newcastle.edu.au/aspirations](http://www.newcastle.edu.au/aspirations)

e: [aspirations@newcastle.edu.au](mailto:aspirations@newcastle.edu.au)

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#### *Notes.*

1. The analysis presented here is preliminary and draws on a subset of data from the Aspirations Longitudinal Study. Analysis of repeated measures was not conducted on the dataset used in this presentation but has been undertaken elsewhere (Gore et al., 2015).
2. Funding for the Aspirations Longitudinal Study was provided by the Australian Research Council, the NSW DEC, and the University of Newcastle. The views expressed in this presentation may not be representative of those of the funding bodies.
3. Funding and support for this analysis was provided by the Australian Government Department of Education and Training through the National VET Research program managed by the National Centre for Vocational Education Research. The views and opinions are those of the project team and do not necessarily reflect the views of the Australian or state/territory governments or the funding bodies.
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