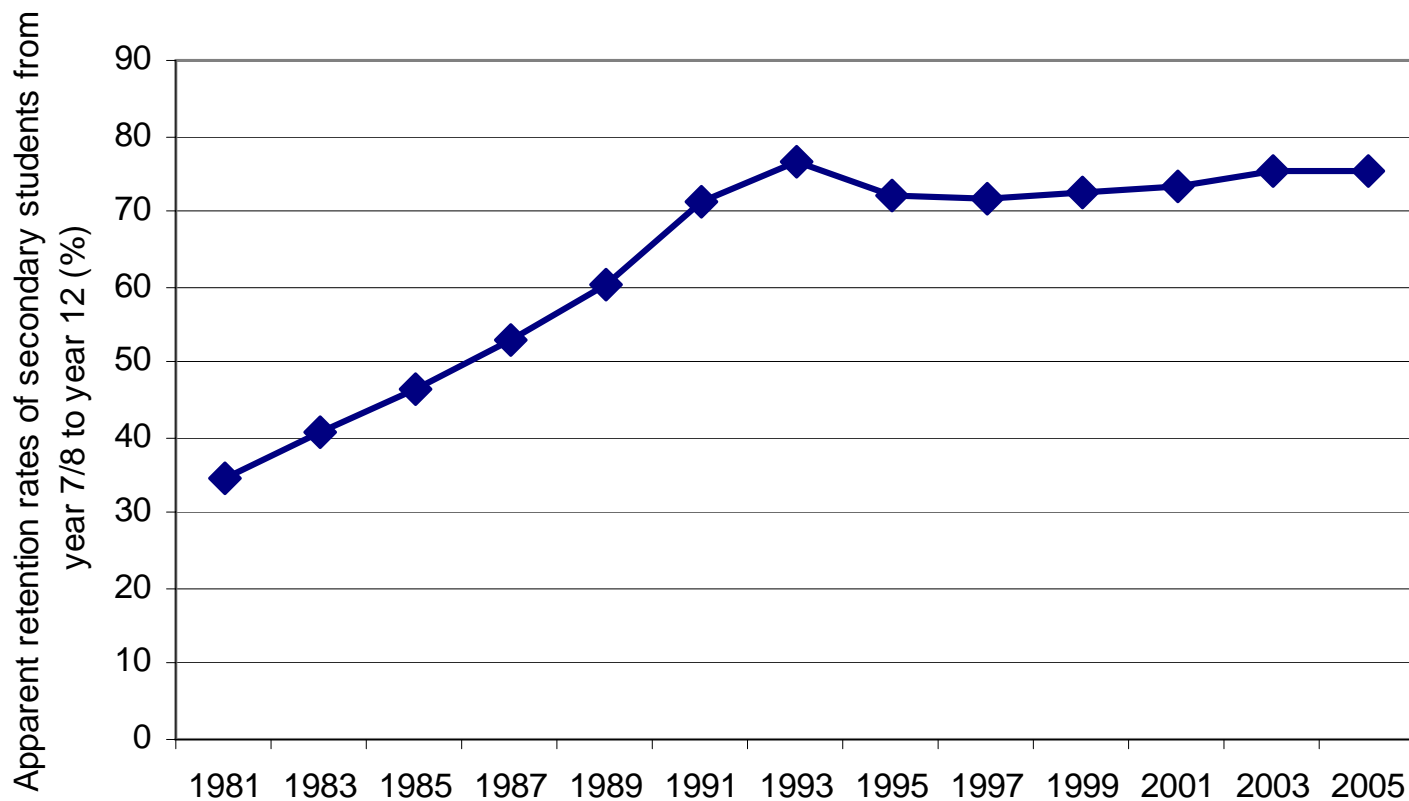


VET in schools

Tom Karmel
November 2007



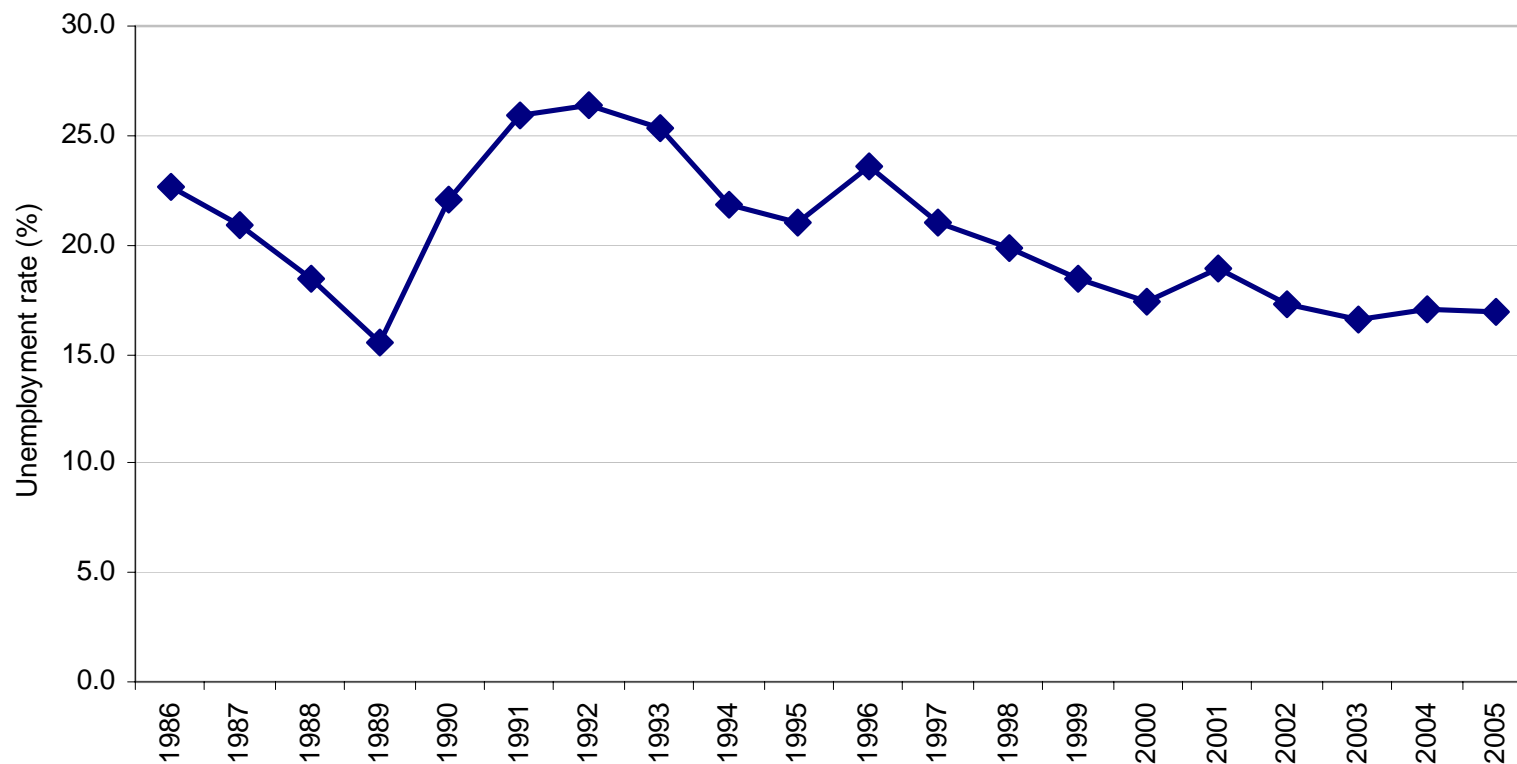
Apparent year 12 retention rates (per cent)



Note: Full-time students only.

Sources: 1981, 1991 & 2001 figures: Australian Bureau of Statistics (ABS) Schools, 2001, cat. no. 4221.0; 1987 & 1997 figures: ABS, Schools, 2002, cat. no. 4221.0; 1983, 1993 & 2003 figures: ABS, Schools, 2003, cat. no. 4221.0; 1989 & 1999 figures: ABS, Schools, 2004, cat. no. 4221.0; 1985, 1995 & 2005 figures: ABS, Schools, 2005, cat. no. 4221.0.

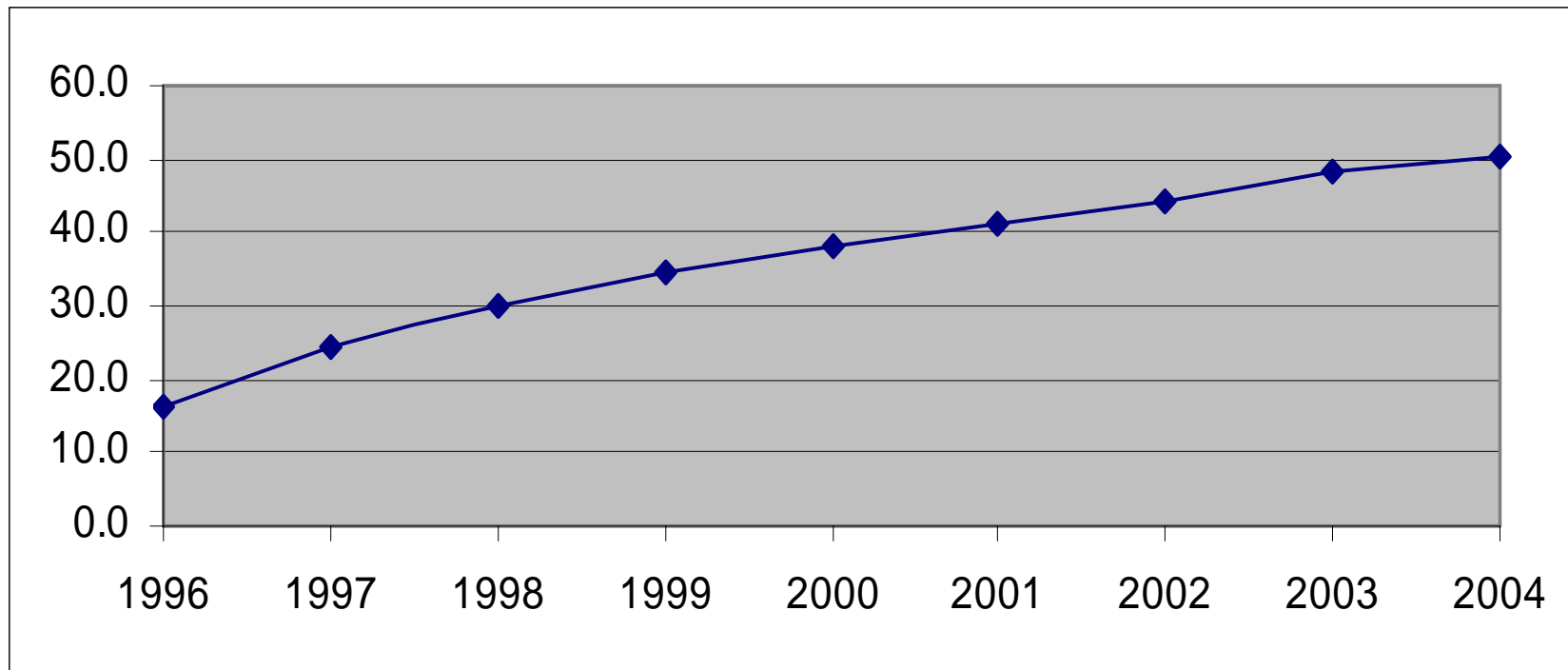
Unemployment rates for persons 15-19 years (per cent)



Note: Unemployment rate equals unemployed persons as a per cent of the labour force.

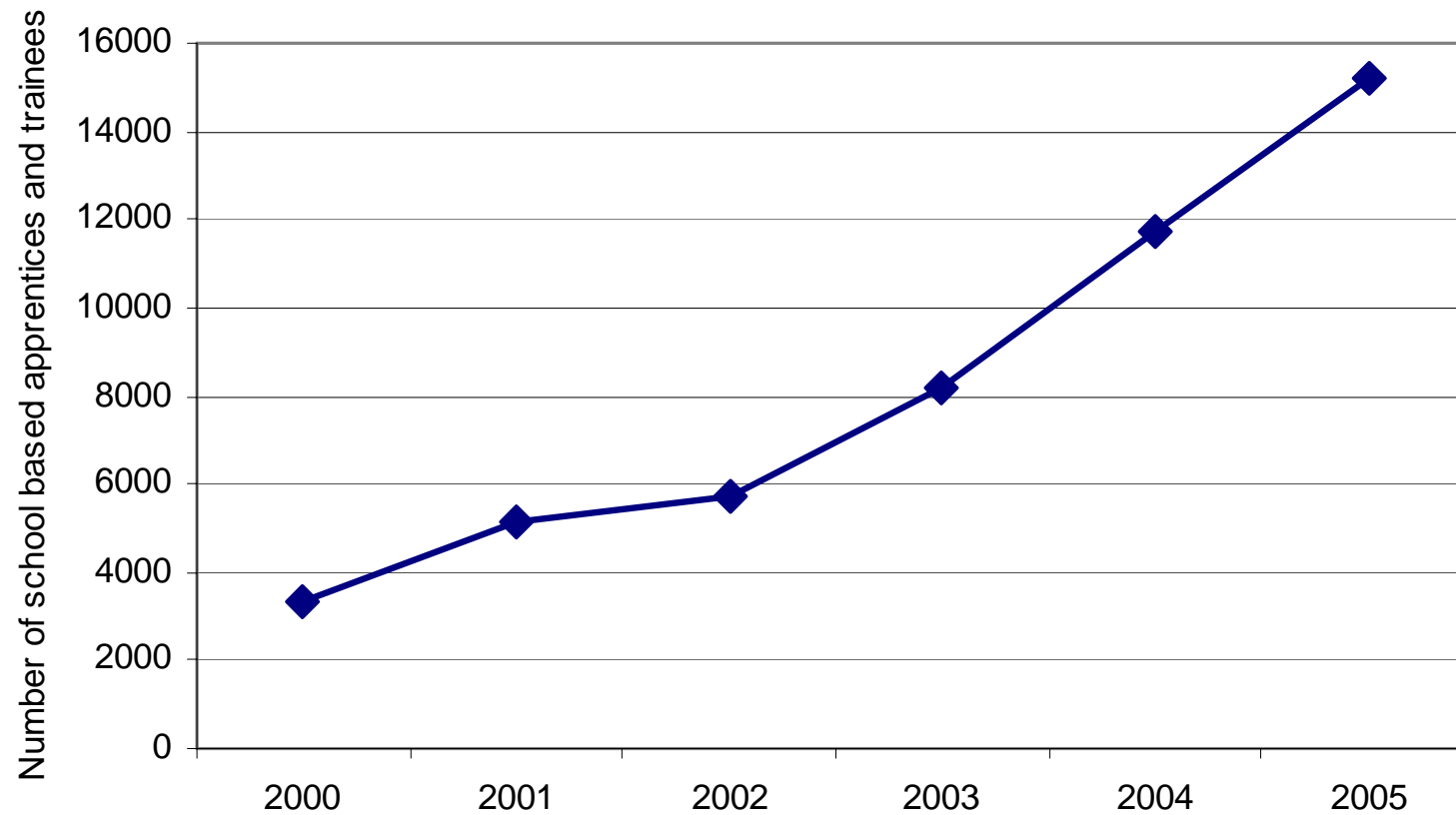
Source: ABS Labour Force, Australia, Detailed - Electronic Delivery, cat no 6291.0.55.001, table 03a

Percentage of year 11 and year 12 students undertaking VET in school, 1996-2004



Source: Number of VET in Schools students: Ministerial Council for Education, Employment, Training and Youth Affairs (MCEETYA) Transition from Schools Taskforce, National data on participation in VET in Schools programs and school-based New Apprenticeships for the 2004 school year. Number of full-time year 11 and 12 students: Australian Bureau of Statistics, Schools Australia, cat. no. 4221.0, 1996-2004

Numbers of school based apprentices and trainees, 2000-2005



Source: NCVER National Apprentice and Trainee Collection, based on June 2006 estimates.

Course information in 2003 for male VET students

Field of education	16-17 yrs, VET in schools (n=59,235)	16-17 yrs, non-school VET (n=72,544)	18-19 yrs, VET (n=108,774)
Information technology	24.4%	6.9%	7.4%
Engineering and rel. tech.	18.6%	30.6%	31.6%
Management and commerce	15.8%	10.0%	14.2%
Food, hospitality & pers. svces	12.0%	9.8%	10.2%
Architecture and building	10.2%	13.1%	13.4%
Agriculture, env. & rel. studies	4.3%	6.7%	5.3%
Mixed field programmes	6.3%	12.3%	6.9%
Others	8.3%	10.7%	10.8%
Total	100.0%	100.0%	100.0%

Course information in 2003 for female VET students

Field of education	16-17 yrs, VET in schools (n=58,739)	16-17 yrs, non-school VET (n=58,827)	18-19 yrs, VET (n=87,568)
Information technology	10.8%	2.7%	2.0%
Engineering and rel. tech.	2.2%	2.8%	3.3%
Management and commerce	32.8%	29.8%	37.5%
Food, hospitality & pers. svces	31.0%	24.1%	18.1%
Architecture and building	0.3%	0.5%	1.2%
Agriculture, env. & rel. studies	3.0%	3.3%	2.0%
Mixed field programmes	5.7%	13.5%	8.5%
Others	14.1%	23.4%	27.5%
Total	100.0%	100.0%	100.0%

Qualification level information in 2003 for male VET students

Qualification level	16-17 yrs, VET in schools (n=59,235)	16-17 yrs, Non-school VET (n=72,544)	18-19 yrs, VET n=108,774)
Diploma or higher	0.0%	2.7%	15.4%
Certificate IV	0.3%	3.0%	9.5%
Certificate III	8.1%	30.6%	42.4%
Certificate II	61.2%	32.5%	15.0%
Certificate I	23.6%	14.3%	4.1%
Secondary education	0.0%	1.2%	1.1%
No award courses	0.4%	3.2%	3.0%
Other education	6.4%	11.3%	8.7%
Subject only – no qualification	0.0%	1.2%	0.8%
Total	100.0%	100.0%	100.0%

Qualification level information in 2003 for female VET students

Qualification level	16-17 yrs, VET in schools (n=58,739)	16-17 yrs, Non-school VET (n=58,827)	18-19 yrs, VET (n=87,568)
Diploma or higher	0.0%	3.5%	20.6%
Certificate IV	0.3%	3.4%	11.5%
Certificate III	9.3%	26.6%	31.5%
Certificate II	73.3%	44.0%	18.8%
Certificate I	11.6%	5.8%	2.5%
Secondary education	0.0%	1.9%	1.6%
No award courses	0.2%	2.8%	2.8%
Other education	5.3%	10.2%	9.2%
Subject only – no qualification	0.0%	1.8%	1.4%
Total	100.0%	100.0%	100.0%

Apprenticeship and traineeship commencements, 2005, classified by training package

	School based (all ages)	Not school based (19 years and under)
Retail	5,900	13,900
Hospitality	2,200	9,100
Business Services *(does not include BSA)	1,300	8,900
Automotive Industry Retail Service and Repair	1,000	8,800
General Construction	500	8,000
Metal and Engineering Industry	600	7,000
Electrotechnology Industry	100	5,600
Hairdressing	400	4,300
Australian Meat Industry	100	2,900
Community Services	300	2,600
Amenity Horticulture	200	1,900
Plumbing and Services	100	1,500
Total	15,200	93,500

Source: NCVER apprenticeship and traineeship collection, March 2006
 Note: Training packages are ordered by importance among the school based apprentices and trainees. The training packages cover all those in which the apprentices or trainees not at school exceed 2,000.

Predicted probability of doing VET in Year 11 by actual academic achievement (%)

Actual academic achievement	
Low score	31.5
Lower middle score	25.9
Upper middle score	21.7
High score	13.5

Predicted probability of doing VET in Year 11 by student aspiration (%)

Aspiration	
Intended to do Year 12	24.9
Intended to leave before Year 12	32.4

Impact of VET in schools on retention rates (males)

	Yr 10-11 retention	Yr 11-12 retention	Yr 10-12 retention
Undertook VET at Year 11	+1.4%	-3.3%	-1.8%
Did not do VET at Year 11	0.0	0.0	0.0
All males	+0.4%	-0.9%	-0.5%

Impact of VET in schools on retention rates (females)

	Yr 10-11 retention	Yr 11-12 retention	Yr 10-12 retention
Undertook VET at year 11	+0.8%	-1.3%	-0.6%
Did not do VET at year 11	0.0	0.0	0.0
All females	+0.2%	-0.3%	-0.2%

School VET and successful post-school outcomes (Boys)

Highest school level	VET	Non-VET	Difference
2001	%	%	%
Year 11	78.9	67.6	+11.3
Year 10	-	76.2	n/a
2000			
Year 10	-	68.0	n/a

School VET and successful post-school outcomes (Girls)

Highest school level	VET	Non-VET	Difference
2001	%	%	%
Year 11	63.7	48.9	+14.8
Year 10	-	55.0	n/a
2000			
Year 10	-	46.7	n/a

Attended VET in 2002

Outcomes in 2002		Year 12 ¹		Year 11 ²		Year 10 ³
		VET	Non-VET	VET	Non-VET	Non-VET
Boys	(n)	658	2,286	146	175	252
	(%)	43.4	25.7	68.5	57.7	68.3
Girls	(n)	766	2,574	81	155	231
	(%)	42.0	21.5	53.1	47.1	55.0

1 One year post-school

2 Two years post school

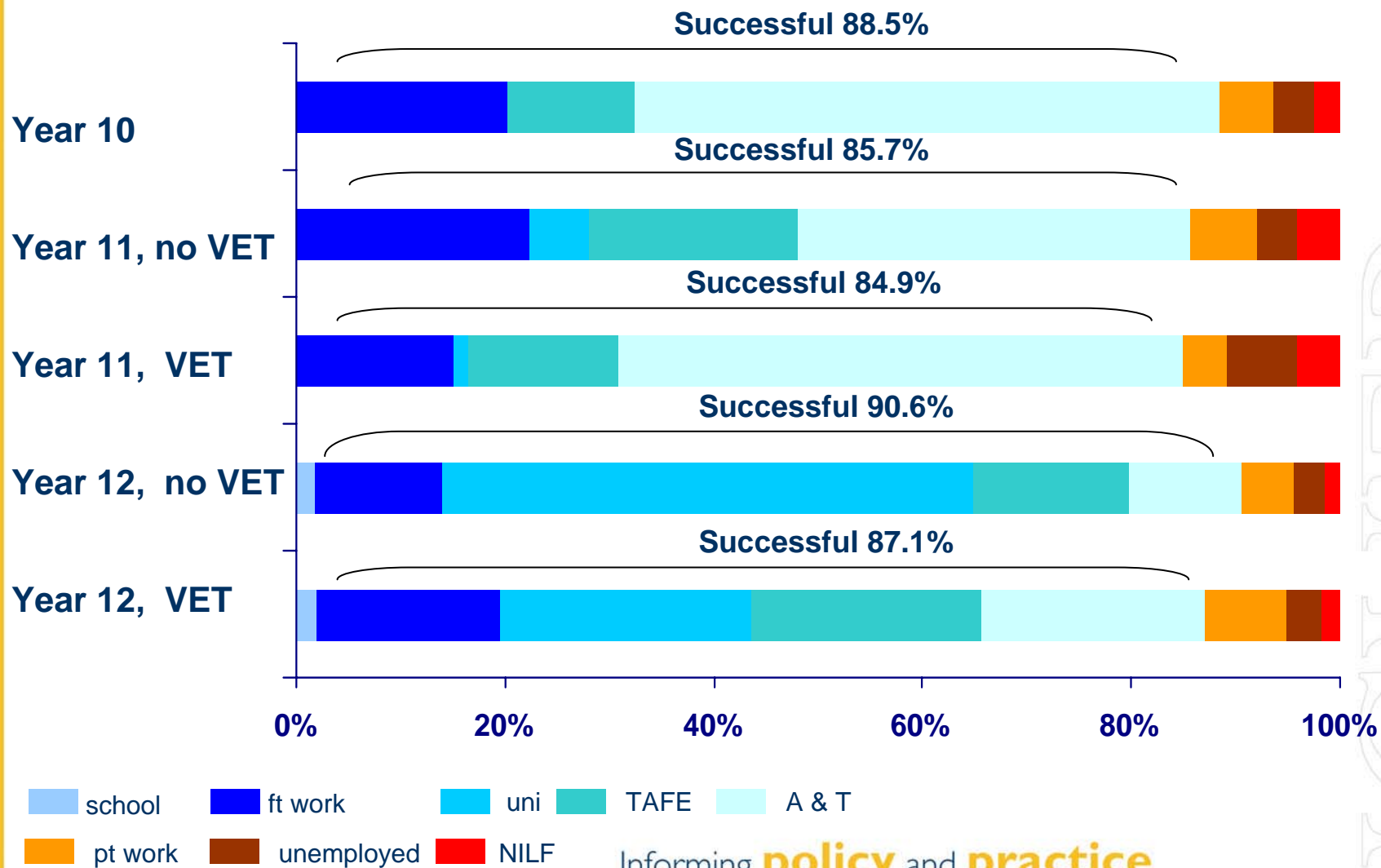
3 Three years post school

Thank you

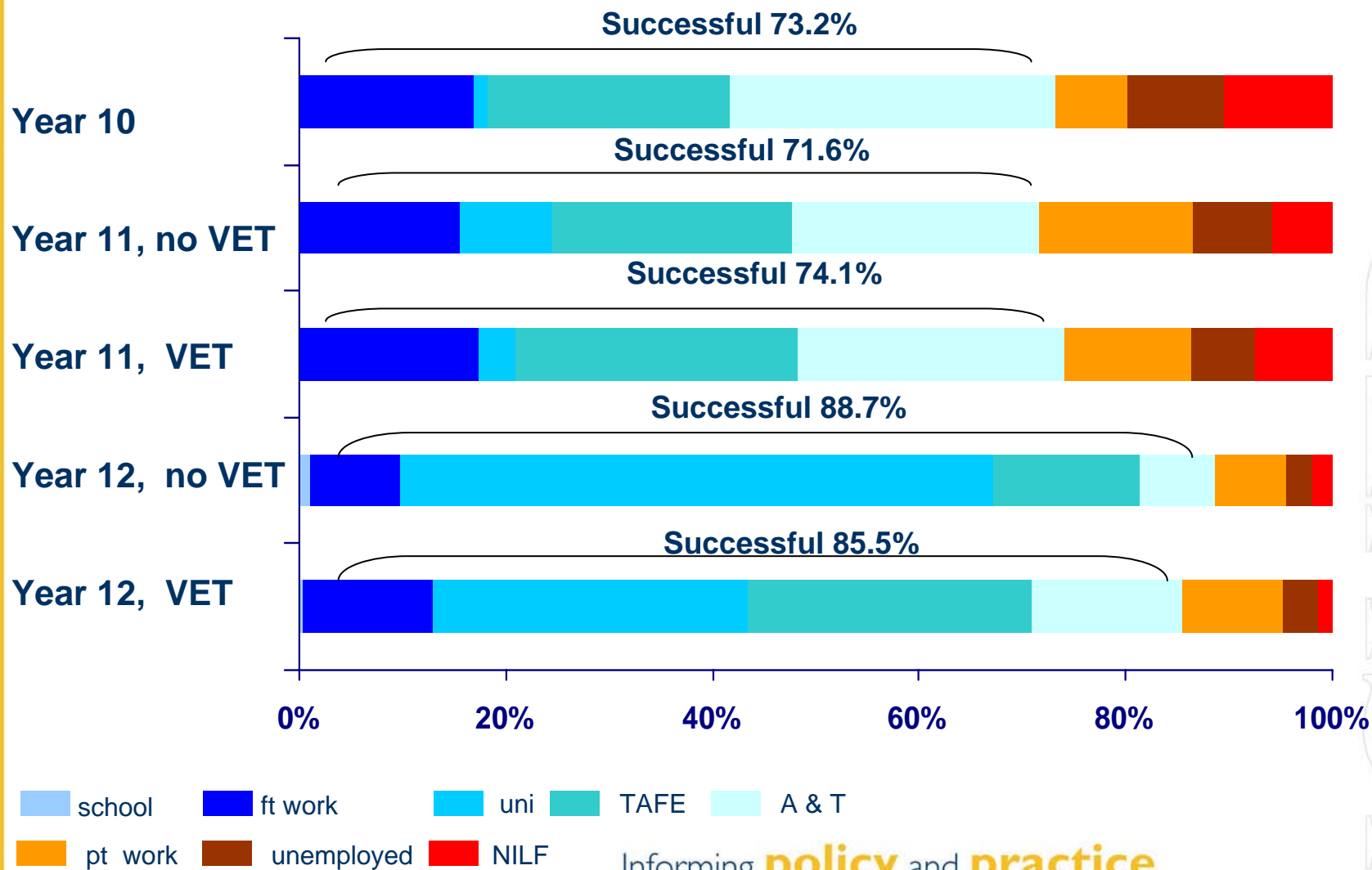
Post-school outcomes

- Successful:
 - at school
 - full-time work
 - university or TAFE
 - apprenticeship/traineeship
- Unsuccessful:
 - part-time work only
 - unemployed
 - not in labour force

Boys post-school outcomes, 2002



Girls post-school outcomes, 2002



Post school outcomes for early school leavers in 2000, 2001 and 2002 (Boys)

Outcomes	Year 10 Completers (%)		
	2000 ¹	2001 ²	2002 ³
Successful	69.5	76.8	88.5
Unsuccessful	30.5	23.2	11.5
Total	100.0	100.0	100.0

- 1 One year post-school
- 2 Two years post school
- 3 Three years post school

Post school outcomes for early school leavers in 2000, 2001 and 2002 (Girls)

Outcomes	Year 10 Completers (%)		
	2000 ¹	2001 ²	2002 ³
Successful	48.4	53.8	73.2
Unsuccessful	51.6	46.2	26.8
Total	100.0	100.0	100.0

- 1 One year post-school
- 2 Two years post school
- 3 Three years post school

School VET and successful post-school outcomes (Boys)

Highest school level	VET	Non-VET	Difference
2002	%	%	%
Year 12	88.1	90.2	-2.1
Year 11	91.4	88.6	+2.8
Year 10	-	92.4	n/a

School VET and successful post-school outcomes (Girls)

Highest school level	VET	Non-VET	Difference
2002	%	%	%
Year 12	87.9	88.9	-1.0
Year 11	83.6	78.4	+5.2
Year 10	-	81.3	n/a

VET in schools as a VET pathway

- How do VET at school and VET out of school line up?
- Is VET at school a pathway for those who continue with VET?

Conclusions

- VET in schools has grown enormously
- Those who do VET in schools and leave after Year 11 do better than other Year 11 leavers
- The positive effect is mostly about speed of transition
- VET in schools offerings do not line up that well with what the world of work wants
 - fields of education differ
 - not enough Certificate IIIs at school
- VET in schools is a VET pathway for some boys but few girls

Conclusions

- VET in schools offerings do not line up that well with what the world of work wants
 - fields of education differ
 - not enough Certificate IIIs at school
- VET in schools is a VET pathway for some boys but few girls
- Should VET in schools be better aligned with world of work?
- Or should VET in schools be treated as pre-vocational?

Structure

- Who does VET in schools?
- Impact on Year 12 retention
- Post-school outcomes
- VET in schools as a VET pathway

Predicted probability of doing VET in Year 11 by parental education (%)

Parental education	
Did not complete secondary school	29.1
Completed sec. school/apprenticeship only	27.7
TAFE	27.8
University	20.7

Predicted probability of doing VET in Year 11 by self-perceived academic ability (%)

Self-perceived academic ability

Low score	30.2
Lower middle score	26.4
Upper middle score	22.6
High score	16.6

Predicted probability of doing VET in Year 11 by perceived attitude of peer (%)

Perceived attitude of peer	
Very poor	26.3
Poor	26.3
Good	26.3
Very good	26.1

Predicted probability of doing VET in Year 11 by engagement with school (%)

Engagement with school	
Low score	26.7
Medium score	26.1
High score	22.3

Year 12 retention

Informing **policy** and **practice**
in Australia's **training system**

VET in school and Year 12 completion

- VET generally only at years 11 and 12
- Considerable drop out after year 10
- LSAY suffers from attrition
- Issues about self-selection
- Nevertheless.....

Post-school outcomes

Informing **policy** and **practice**
in Australia's **training system**

VET pathways

Informing **policy** and **practice**
in Australia's **training system**

Conclusions

- VET in schools has grown enormously
- Evidence suggests that it has had a negative effect on Year 11-12 retention offsetting increase in Year 10-11 retention
- Overall conclude no increase in Year 12 retention
- Those who do VET in schools and leave after Year 11 do better than other Year 11 leavers
- The positive effect is mostly about speed of transition

Who does VET in school?

- LSAY provides a rich set of variables:
 - gender, school type, State, rurality, ethnicity, parental occupation and education, academic achievement (actual and self-perception), engagement with school, aspiration, attitudes of peers

Number of male VET students going on with VET

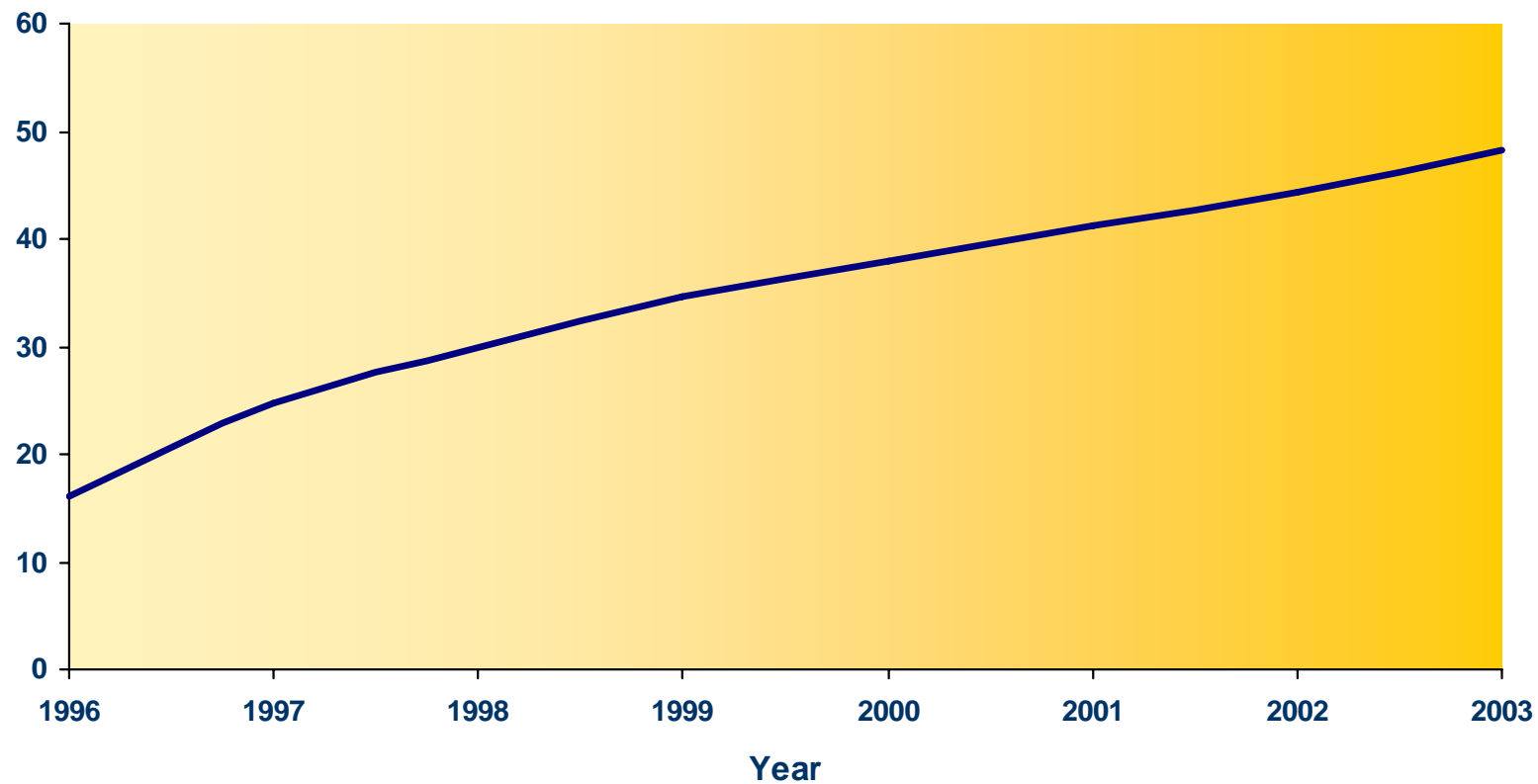
Field of Education in 2000	No. doing school VET programs	Expected no. continuing	Actual no. continuing
Information Technology	2	0.03	1
Engineering & related technologies	11	2.08	7
Management & commerce	20	4.05	8
Food, hospitality and personal services	10	1.49	6
Architecture & Building	1	0.03	1
Agriculture, environment & related studies	3	0.08	1
Mixed field programmes	11	0.89	3
Others	16	1.95	8
Total	74	10.60	35

Number of female VET students going on with VET

Field of Education in 2000	No. doing school VET programs	Expected no. continuing	Actual no. continuing
Information Technology	7	0.82	1
Engineering & related technologies	12	1.19	0
Management & commerce	46	7.05	2
Food, hospitality and personal services	17	1.69	0
Architecture & Building	4	0.29	1
Agriculture, environment & related studies	6	0.38	2
Mixed field programmes	11	0.89	0
Others	8	0.44	1
Total	111	12.74	7

Participation of students in school VET programs

% Participation



* Source MCEETYA, Transition from Schools Taskforce, 2004

Informing **policy** and **practice**
in Australia's **training system**