



# A world of tertiary education information at your fingertips

VOCEDplus and Knowledge discovery

Presented by Kelly Frazer Knowledge Management Branch, NCVER





# What the workshop will cover

- What is VOCEDplus?
- Tools to help understand and stay up to date with the VET sector
- Searching and using VOCEDplus for research
- Wrap-up





# Knowledge Management Branch

### **Purpose**

- To provide a solid knowledge foundation that enables NCVER to be Australia's authoritative source of high-quality, independent information on vocational education and training.
- Knowledge support addressing the research needs of the VET sector





### Information 'avalanche'

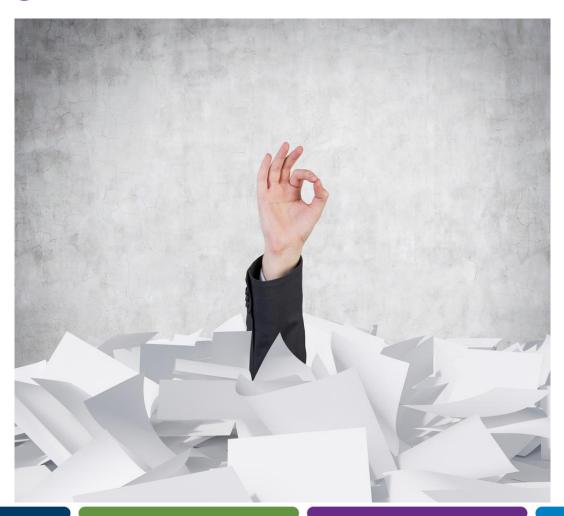


The VET sector is no exception





# Finding the best content







# What is VOCEDplus?







# Facts and figures

- 75,000+ items
- 43,000+ full text items
- 14,900+ peer reviewed items
- 348,836 visits in 2016-17
- 900+ document delivery requests filled 2016-17
- Visitors from all over the world
- Most used collection Australian landmark reports
- www.voced.edu.au





# Benefits of our products and services

- Quick and easy accessibility
- Substantial time savings
- Information linkage
- Content curated into one place
- Content controlled for quality, relevance, reliability and currency
- Trend awareness and analysis
- Historical archive





# Scenario - Apprenticeships

### Current issues

- Attrition and completion reasons for attrition; trends in commencement and completion rates
- Adult apprenticeships benefits and disadvantages for adult apprentices and employers
- Different models accelerated (competency vs timeserved); off-the-job then on-the-job
- International degree apprentices, apprenticeship reform





# Scenario - Apprenticeships

You have been tasked with writing a research briefing looking at apprenticeships over the past 15 years with a particular focus on the return on investment for government/public spending.

- Where do you begin finding information?
- How do you find quality information with the least amount of effort?
- How do you know if the information is current, relevant and credible?





# VOCEDplus

# www.voced.edu.au





My Selection Home About Browse Tools Our Services Help Contact **Special Collections** Quick Links Search **VET Knowledge Bank** Australian landmark reports Search... Search Pod Network National reports · State and territory reports Advanced Search Focus on... · National higher education Glossary of VET reports VOCEDplus is NCVER's free international research database for tertiary education relating to workforce needs, Key research and policy by skills development, and social inclusion. >> More information region Key conferences VOCEDplus News Pathways support for practitioners O VET Knowledge Bank Follow us on Twitter UNESCO-UNEVOC collection >>More collections Follow @VOCEDplus Follow @VOCEDplusTitles

#### **New Titles**

The puzzles and contradictions of the Indian labour market:

The future of transportation work: technology, work

Concentration in US labor markets: evidence from online vacancy data

#### System Notices

- Chrome users may experience difficulty viewing some VOCEDplus search results pages. We are currently working on resolving this issue. Please use another browser until this issue is resolved.
- The next scheduled maintenance of the VOCEDplus website is Thursday 26
   April 2019 between 9:20 10:200M









The VET Knowledge Bank contains a suite of products capturing Australia's diverse, complex and ever-changing vocational education and training (VET) system.

It aims to provide a collected memory of VET reference information.

The VET Knowledge Bank is a living, growing resource. More content will be added in the coming months.



Getting to know VET

Get a broad overview of different aspects of the VET system in Australia.



History of VET

Trace the story of VET in Australia through timelines and key publications.



**Policy initiatives** 

View a timeline of VET policies, programs and initiatives covering the last 20 years.



Landmark documents

Explore the evolution of VET in Australia through this collection of landmark documents.



Governance

Access information about who governs and regulates VET in Australian.



Organisations and resources

Discover key Australian research organisations and useful VET resources.



**Glossary of VET** 

Understand the terms and acronyms used in Australian VET.



**Further reading** 

Read the main information sources consulted in developing the VET Knowledge Bank.

#### **VET CONSUMERS** VET CONSUMER ADVICE Secondary school students MySkills Post-secondary school students MyFuture States/Territories skills advisory sites Industry and employers Job services/support Employees (re-skilling/up-skilling/cross-skilling) Youth programs NEETs (those Not in Education, Employment, or Training) Unique Student Identifier (USI) **PATHWAYS** Foundation/ General VET Higher Pre-apprenticeships VET in Apprenticeships and Employment enabling courses education courses and pre-traineeships Schools traineeships reskilling upskilling cross-skilling TRAINING **PROVIDERS** STUDENT **PRODUCTS** CHOICE Registered training organisations (RTOs) and other providers Community education providers Training packages - Skill sets Enterprise providers Accredited courses Group training organisations Private training providers Industry certification Secondary schools Australian Qualifications TAFE institutes Framework (AQF) Universities (dual sector providers) AQF qualifications Provider peak bodies Certificate I · Diploma · Bachelor degree · Adult Learning Australia (ALA) · Enterprise Registered Training Certificate II · Bachelor honours · Australian Council for Private Advanced diploma Organisation Association (ERTOA) Certificate III · Associate degree degree Education and Training · National Apprentice Employment · Graduate certificate · Certificate IV (ACPET) Network (NAEN), formerly Group · Graduate diploma · Community Colleges Australia Training Australia (GTA) · Masters degree (CCA) · TAFE Directors Australia (TDA)

#### VET SYSTEM DRIVERS AND ENABLERS



#### INDUSTRY

#### Industry leadership

- Australian Industry and Skills Committee (AISC)
- Industry Reference Committees (IRCs)
- Skills Service Organisations (SSOs) Industry peak bodies

#### GOVERNANCE

- · Ministers responsible for skills and training
- COAG Industry Skills Council (CISC)
- Commonwealth Department of Education and Training:
- State/territory training authorities
- Training Ombudsmen



· Doctoral decree

#### POLICY DRIVERS

- · Economic environment Changing technology and innovation
- Labour market and industry skill needs and research
- Population demographics
- Regional skilling Access and equity
- · Government priorities Globalisation and immigration



- · Australian Skills Quality Authority (ASQA)
- Victorian Registration and Qualifications Authority (VRQA)
- Training Accreditation Council (TAC) (WA)
- Tertiary Education Quality and Standards Agency (TEQSA)



#### FUNDING

- National Agreement for Skills and Worldorce Development (NASWD)
- National Partnerships Agreement on Skills Reform - superseded by Skilling Australians Fund
- Subsidies and incentives VET Student Loans



#### VET DATA AND INTELLIGENCE

- National VET data collections and **SUPVEYS**
- NCVER and VOCEDplus
- VET research organisations and centres
- National Industry Insights Report





#### Getting to know VET > Overviews > Apprenticeships and traineeships

Apprenticeships and traineeships are formal training arrangements that combine training and employment and lead to nationally recognised qualifications. An apprentice enters into a contract of training or training agreement with an employer, which imposes mutual obligations on both parties.

Group training offers an alternative employment arrangement. The group training organisation (GTO) recruits the apprentice or trainee and takes on the role of employer. The apprentice or trainee is placed with a 'host' employer while they undertake training.

As at 31 December 2016, there were 265 000 apprentices and trainees in Australia (Source: NCVER's Apprentices and trainees annual).

#### What is the difference between apprenticeships and traineeships?

Apprenticeships usually take three to four years to complete and lead to a trade qualification. Traineeships provide vocational qualifications (minimum of a Certificate II) to work in a particular industry or occupation and generally take approximately one to two years to complete. Traineeships are now part of the Australian Apprenticeships system.

#### **Australian Apprenticeships**

Australian Apprenticeships is the new name (from 1 July 2006) for the scheme formerly known as New Apprenticeships. Often referred to as apprenticeships or traineeships, Australian Apprenticeships are available in a variety of certificate levels in more than 500 occupations across Australia in traditional trades, as well as in a diverse range of emerging careers in most sectors of business and industry.

Australian Apprenticeships can be undertaken by anyone of working age. No previous qualification is required and it is open to school-leavers, those re-entering the workforce or adult workers looking to change their careers. Students in Year 11 or 12 can begin their apprenticeship or traineeship while still at school. Apprentices and trainees can combine time at work with training, either full-time or part-time or school-based.

#### Australian School-based Apprenticeships

An Australian School-based Apprenticeship is an Australian Apprenticeship undertaken part-time while the apprentice is at school. It offers hands-on industry experience and the ability to work towards or complete a nationally recognised qualification while they complete their secondary school certificate.

#### Australian Apprenticeships Incentives Program (AAIP)

The Australian Apprenticeships Incentives Program (AAIP), formerly called the New Apprenticeships Incentives Programme (NAIP), offers financial incentives to eligible employers who take on an Australian Apprentice and personal benefits to individuals to encourage them to enter into skills-based training. Incentives and personal benefits include: Rural and Regional Skills Shortage incentive; Trade Support Loans and Living Away From Home Allowance.





# Timeline of VET Policy Initiatives

Select a region

Click on an individual State/

Commonwealth

NSW

Vic

Qld

SA

WA

Tas

NT

Economic event Government

ACT

Territory or hold 'Ctrl' while selecting multiple regions.









Social











Select a category

Click on an individual category or hold 'Ctrl' while selecting multiple categories.



VET reform



Regulation





Apprentices & trainees



VET within schools



Economic objective





2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

VET reform Acts Amendment (Education Loan Scheme) Act TAFE Rescue Pargkage Tasmanian Skills Investment Program (TasSkills) VET FEE-HELP COAG VET reforms Skills reform policy Victorian Training Guarantee Building Australia's Future Workforce New training entitlement for those without Certificate III Refocusing Vocational Training in Victoria initiative Skills for All Budget cuts to TAFE announced





#### Governance

The aim of this product is to provide easy access to information about who governs and regulates vocational education and training (VET) in Australia. This page lists the current ministers responsible for skills and training, the VET regulators, and the state and territory training authorities. Also provided are links to timelines of Australian prime ministers, the federal ministers and the Australian Government departments responsible for skills and training between 1992 to present and VET policy initiatives from 1998-2017 that have influenced participation in VET. Timelines of VET legislation and COAG Ministerial Councils and Committees, and links to federal, state and territory budgets are currently under development and will be available soon.

#### COAG Industry and Skills Council (CISC)

The Council of Australian Governments (COAG) is the peak intergovernmental forum in Australia. It is supported by inter-jurisdictional, ministerial-level councils that facilitate consultation and cooperation between the Commonwealth and the states and territories. The COAG Industry and Skills Council (CISC) was established in December 2013 and comprises state and territory ministers with responsibility for industry and/or skills portfolios. It replaced the former Standing Council for Tertiary Education Skills and Employment (SCOTESE). CISC's role is to initiate, develop and monitor the implementation of policy reforms of national significance which require co-operative action by Australian governments.

#### Current Ministers responsible for skills and training

Federal	Simon Birmingham, Minister for Education and Training
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Karen Andrews, Assistant Minister for Vocational Education and Skills

States and territories

Australian Capital Territory Meegan Fitzharris, Minister for Higher Education, Training and Research

New South Wales John Barilaro, Deputy Premier and Minister for Regional NSW, Skills and Small Business

Adam John Marshall, Assistant Minister for Skills

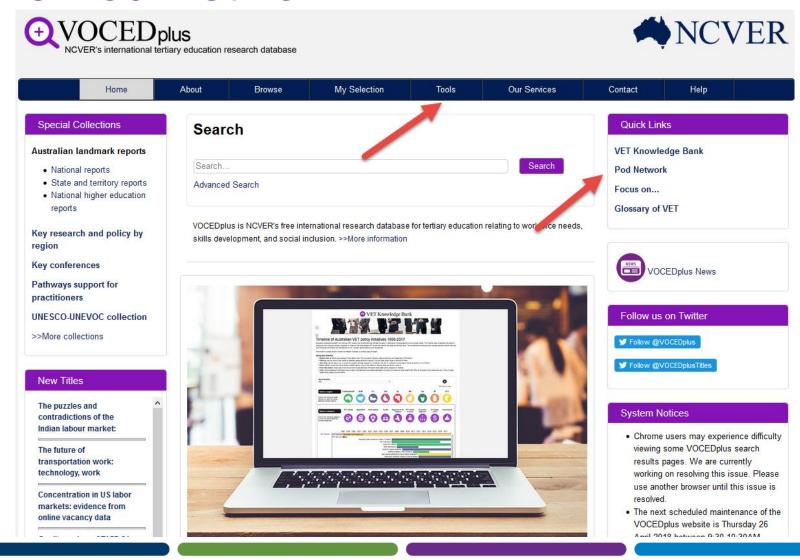
Northern Territory Michael Gunner, Chief Minister and Minister for Trade, Business and Innovation

Eva Lawler, Minister for Education





### The Pod Network





Students

Sustainability



Archive

transitions

# Apprenticeships and traineeships Pod



The VOCEDplus Pod Network allows instant access to research and a multitude of resources in a convenient and efficient platform. It saves you time and effort by presenting relevant, quality resources in one location within themsed pages called Pods. Here you can realise the full potential of VOCEDplus and keep pace with the latest research developments within the sector.

This site is being expanded. Your opinion is a valuable part of site development, please use this form for feedback, comments and suggestions.

Teaching and

learning



Technology

Workforce

development





### What's in a Pod

#### Related Podlets

This site is being expanded - inactive Podlets will be launched over the coming months.

Apprenticeship models

Best practice

Competency based training

Education and training pathways

Employer role

Funding models

Government role

Registered training organisations

Return on investment

Training packages

VET in schools

All Podlets

#### All Pods



Apprenticeships and traineeships

Career development

Employment

Equity

Financial aspects

Foundation skills



#### Apprenticeships and traineeships



Apprenticeships and traineeships combine training and employment that lead to a nationally recognised qualification. They are available to re-entry workers, school leavers, or anyone of working age and do not require any entry qualifications. An apprentice enters into a contract of training or training agreement with an employer which imposes mutual obligations on both parties. Apprenticeships take between one to four years. Traineeships generally take one to two years and are now part of many apprenticeship systems. Historically, apprenticeships and traineeships have provided important pathways into the workforce, particularly for young people making the transition from school. The very nature of apprenticeships and traineeships makes them particularly susceptible to fluctuations in the labour market. Recently, through government initiatives aimed at boosting their numbers and broadening participation, apprenticeships and traineeships have undergone a renaissance.

#### Research

#### Access items in VOCEDplus

- Completion
- Participation
- Partnerships

#### Recent publications

A European quality framework for apprenticeships: a European Trade Union proposal NEW

#### News

Flexibility and Innovation in Apprenticeship Technical Training (FIATT) [Canada] (Source: Canadian Apprenticeship Forum, September 2016)

New intermediaries will help scale US apprenticeships [US]

(Source: US Department of Labor Blog, September 2016)

Attaining a skill, preparing a workforce [US]

(Source: Community College Daily, September 2016)

School launches pre-apprenticeship programme for 14-year-olds [UK] (Source: TES, September 2016)

Young people let down by poor careers advice [UK]

(Source: TES, September 2016)

The new apprenticeship model: high-tech and high pay [Australia] (Source: Australian Financial Review,

September 2016)

August 2016)

Let's talk about apprenticeship reform

(Source: Manufacturers' Monthly, September 2016)

Ai Group leads high-level Industry 4.0 apprenticeship initiative

(Source: Australian Industry Group, September 2016)

University-led apprenticeships: a new model for apprentice-education [UK] (Source: University of Sheffield News,





## Research

- Topical searches
- Recent publications
- Suggested reading

#### Research

#### Access items in VOCEDplus

- Completion
- Participation
- Partnerships

#### Recent publications

- A European quality framework for apprenticeships: a European Trade Union proposal NEW
- A review of apprenticeships and traineeships in New South Wales: consultation paper July 2016 [Australia] NEW
- Apprenticeships and traineeships for 16 to 19 year-olds: sixth report of session 2014-15
   [UK] NEW
- Apprenticeships Reform Advisory Group: recommendation report [Australia] NEW
- Apprenticeships: the path to success? [UK] NEW
- England's apprenticeships: assessing the new system NEW
- Prior qualifications of adult apprentices 2013-2014 [UK] NEW
- Quality apprenticeships: a comparative analysis [international]
- Recasting American apprenticeship: a summary of the barriers to apprenticeship expansion research project NEW
- The effect of choice options in training curricula on the supply and demand for apprenticeships [Germany] NEW
- The future growth of degree apprenticeships [UK]
- The more they spend, the more I earn?: firms' training investments and post-training wages of apprentices [Germany] NEW
- The value of apprenticeships: beyond wages [UK] NEW
- · Traineeships: first year process evaluation [UK] NEW
- Where next for apprenticeships? [UK] NEW



### Resources

- Organisations
- Journals
- Statistics

#### Resources

#### General

- Apprenticeships [UK]
- Apprenticeship USA
- Apprenticeship USA (Department of Labor)
- Australian Apprenticeships
- Australian Apprenticeships and Traineeships Information Service
- · Australian Apprenticeships Support Network
- · Australian Apprenticeships Pathways
- Australian Government Department of Education and Training
   access items in VOCEDplus
- · Australian landmark reports:
  - o apprenticeships
  - o traineeships
- · Canadian Apprenticeship Forum
  - o access items in VOCEDplus
- Euro Apprenticeship
- . European Alliance for Apprenticeships
- · Group Training Australia
  - · access items in VOCEDplus
- · New Zealand Apprenticeships
- · Provincial-territorial apprentice mobility guidelines [Canada]
- Skilled Trades Network [Canada]
- The small business guide to employing an apprentice [UK]
- VETnetworker (journal) [Australia]
  - access items in VOCEDplus

#### **Statistical**

- Apprentices and trainees collection (NCVER) [Australia]
- Apprentice and trainee destinations survey (NCVER) [Australia]
- Apprenticeships and traineeships topics (Australian Bureau of Statistics)
- · Apprenticeship topics (Statistics Canada)
- Apprenticeship topics (National Center for Education Statistics) [US]





## **NCVER** links

- Relevant details from the NCVER Research program
- Resources
- Publications

#### NCVER focus

#### Resources

- · Apprentice and trainee collection
- Apprentice and trainee destination survey
- Apprenticeships and Traineeships publications
- History of VET in Australia timeling
- · NCVER media releases
- NCVER webinar series
  - Apprentices and trainees: how do we estimate our data? NEW
  - What's the secret of organisation with apprentice completion rate around 90 per cent? NEW

onwards

#### Current work in progress:

 Higher Apprenticeships opportunities and barrie

#### **Publications**

- A chance to be bold and ambitious: make apprenticeships the lynchpin to a better integrated tertiary education sector
- A guide to the Apprentices and trainees estimates review dashboard NEW
- Apprentices and trainees 2016: infographic
- Apprentices and trainees 2017:
   September quarter: Australia NEW
- Australian apprenticeships: trends, challenges and future opportunities for dealing with Industry 4.0
- Australian vocational education and training statistics: apprentices and trainees 2016: annual
- Australian vocational education and training statistics: completion and attrition rates for apprentices and trainees 2016
- Historical time series of apprenticeships and traineeships in Australia: infographic
- The changing nature of

ntio YOA

# **™**NCVER

#### News

Flexibility and Innovation in Apprenticeship Technical Training (FIATT) [Canada]

(Source: Canadian Apprenticeship Forum,

September 2016)

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Let's talk about apprenticeship reform [Australia]

(Source: Manufacturers' Monthly, September

2016)

Ai Group leads high-level Industry 4.0 apprenticeship initiative

#### Media

Webinar: Apprenticeship Levy and

Proposals for Register of Apprenticeship

Training Providers NEW

(Source: YouTube, August 2016)



Are apprenticeships better value than university? [UK] **NEW** 

(Source: BBC Politics Hub on YouTube,

September 2016)



An appreciation for apprentices [Australia] NEW

#### **Events**

Skilled Trades Opportunities for Women webinar series **NEW** 

4, 12, 18 and 25 October 2016

Online

Apprenticeships and Traineeships

Conference

17 October 2016

London, England

2nd Are You Prepared for the Apprenticeship

Levy Conference

27 October 2016

Coventry, England

Hiring and Retaining Aboriginal Apprentices:

Challenges and Opportunities NEW

10 November 2016

Halifax, Nova Scotia, Canada

Post 16 Learning and Apprenticeships

Briefing

24 November 2016

Liverpool, England

Association for Career and Technical Education (ACTE) CareerTech VISION 2016

30 November-3 December 2016

Las Vegas, Nevada

FE Week Annual Apprenticeship Conference and Exhibition **NEW** 

22-24 March 2017



# Featured author profile

- Biography
- Recent publications
- Link to all works in VOCEDplus
- Link to Institutional profile

#### Featured author



#### **Erica Smith**

Erica Smith holds a Personal Chair in Vocational Education and Training (VET) at Federation University. Prior to joining Federation University (then University of Ballarat) in 2008, Erica worked at Charles Sturt University where she managed a suite of VET teacher-training programs. Erica has also worked as a personnel manager in industry and has held various positions in the VET sector. She is an experienced researcher and has managed many national and international research projects. She is convenor of the Australian Council of Deans of Education Vocational Education Group (ACDEVEG). Over more than 15

years, Erica has provided advice to the Australian government on a range of VET issues via invited input to parliamentary inquiries and expert round-tables, background papers, and committee participation.

Erica has been researching apprenticeship for 20 years and is co-chair of the International Network on Innovative Apprenticeship (INAP), which was founded in Germany. She hosted the 2015 INAP conference in Ballarat in 2015. She was invited to write the chapter on apprenticeships for the International Encyclopedia of Education (2010) and has edited three special journal editions of *Education +Training* on the topic.

In 2012 Erica led an international project on apprenticeship funded by the ILO and the World Bank. This project covered a team of researchers in 11 countries and developed options for India's apprenticeship systems that were presented to 80 senior stakeholders in India's apprenticeship system in Delhi. The work was taken up by the ILO Geneva office for its submission to the G20 Youth Unemployment Forum. Erica has been invited to present on her work on apprenticeship in the UK, Germany, Italy, Indonesia, Korea and India, throughout Australia, and to CEDEFOP in Greece.

Erica's research group Researching Adult and Vocational Education (RAVE) has recently been designated one of five Research Priority Areas by Federation University under the title 'Improving Policy and Practice in VET'. Erica has recently completed major research projects funded by the Australian Research Council (ARC) about skill in jobs traditionally considered unskilled, and on enterprise Registered Training Organisations; and for the NCVER on employer training. Her current ARC project is on VET teachers and the contribution that their qualifications make to VET quality.

#### Recent publications on apprenticeships

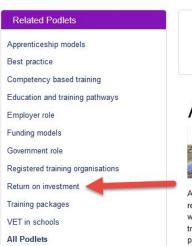
- Apprenticeship management at national and company levels: good practice principles derived from recent research [international]
- High quality traineeships: identifying what works [Australia]
- How can the expansion of the apprenticeship system in India create conditions for greater equity and social justice?
- · Pre-apprenticeships in Australia: differing orientations and their policy implications
- · Rediscovering apprenticeship [international]



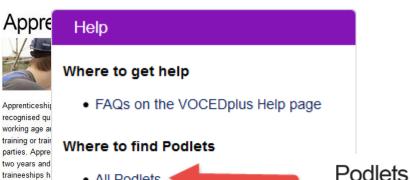
traineeships h



# Navigating the Podlet structure







#### Need more information

Ask a librarian

· All Podlets

#### Have you found this resource useful?

Feedback, comments and suggestion

The VOCEDplus Pod Network contains both Pods and Podlets, all Podlets within the network are listed below.

A Pod covers broad topic areas of VET research containing relevant resources, publications, media, news and events in

A Podlet covers more specific and at times more transient sub-topic areas of VET research containing relevant resources

This site is being expanded - inactive Podlet links will be launched over the coming months. Your opinion is development, please use this form for feedback, comments and suggestions.

r			
	Adult and community education	Globalisation	Return on investment
	Adult learning	Government role	Second chance education
	Adult literacy	Green industry	Self-employment and enti
	Apprenticeship models	Indigenous	Skill demand
	Assessment	Industrial relations	Skill sets
	Best practice	Industry restructuring	Skilled migration
	Capacity building	Industry skills	Social inclusion
	Career guidance	Innovation	Social media
	Classification systems	International education	Socioeconomic status





# Related podlets

#### Related Podlets

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Apprenticeship models

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### Podlet: Return on investment

Return on investment (ROI) in training is generally viewed as the gains derived by individuals, enterprises, governments or society from investing in training in terms of value adding, productivity and profitability.

#### Research

#### Access items in VOCEDplus

- Individual returns on education
- Productivity
- · Return on investment in education and training
- Returns to apprenticeships and traineeships
- · Value of qualifications

#### Recent publications

- Does it pay to complete community college: and how much? [US]
- Does learning trigger learning throughout adulthood?: evidence from training participation of the employed population [Germany] NEW
- Dynamic skill accumulation, education policies and the return to schooling [US]
- Further analysis of the earnings differentials associated with BTECs [UK] NEW
- Global economic benefits of investment in vocational education and training: summary report [international]
- Investing in tertiary education assets [New Zealand]
- Knowledge of earnings risk and major choice: evidence from an information experiment [US]
- Mapping investment in adult skills: which individuals, in what learning and with what returns? [UK]
- Measuring the return on investment in TVET: report of the UNESCO-UNEVOC virtual conference, 9 to 16 May 2016
- Productivity and lifetime earnings of apprentices and graduates [UK]
- Putting your major to work: career paths after college [US]
- Return on investment: what is the value of the associate degree? [US]
- Striking the right balance: costs and benefits of apprenticeship [OECD countries]
- The evolution of returns to education in the Middle East and North Africa: evidence from comparable education policy changes in Tunisia NEW
- The labor market returns to sub-baccalaureate college: a review [US]

#### Related Pods

Apprenticeships and traineeships

Financial aspects

Skills and knowledge

Workforce development

#### All Pods



Apprenticeships and traineeships

Career development

Employment

Equity

Financial aspects

Foundation skills

Industry

Migration

Pathways

Policy and governance

Providers

Quality

Skills and knowledge

Standards

Students

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#### Related Pods

Apprenticeships and traineeships

Financial aspects

Skills and knowledge

Workforce development

#### All Pods



Apprenticeships and traineeships

Career development

Employment

Equity

Financial aspects

Foundation skills

Industry

Migration

Pathways

Policy and governance

Providers

Quality

Skills and knowledge

Standards

Students





#### Filter by authors:

- Muehlemann, Samuel (4)
- Speckesser, Stefan (4)
- Bibby, David (3)
- Higton, John (3)
- Riphahn, Regina T. (3)

Show more

#### Search Results

Enter search terms		Search
Advanced Search		
	1 2 3 4 5 6 7 8 9 no	ext > last »

#### Current search

Search found 102 items

 tm\_metadata.subject:(apprenticeship OR traineeship) AND tm metadata.keyterm: ("return on education and training" OR wage) AND

sm\_metadata.yearpublished:[2012 2018]

#### Filter by subjects:

- Apprenticeship (100)
- Outcomes (79)
- Employment (50)
- Income (47)
- Finance (37)

Show more

#### Productivity and lifetime earnings of apprentices and graduates

This study, by the Centre for Economics and Business Research (CEBR) on behalf of Barclays,

considers the value of... [+] Show more

Corporate author: Barclays Bank

Centre for Economics and Business Research (Cebr)

Date: 2017

Geographic subjects: Great Britain; Europe

Resource type: Report

Subjects: Apprenticeship; Higher education; Students [+] Show more

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- Return on education and training (71)
- Apprentice (36)
- Wage (29)
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#### Apprenticeships for Northern growth: challenges, trends and current reforms

This report gives an overview of some of the key trends in outcomes in economic activity, education

and skills -... [+] Show more

Authors: Dominguez-Reig, Gerard; Sellen, Peter

Date: 2017

Geographic subjects: England; Great Britain; Europe

Resource type: Report

Subjects: Apprenticeship; Governance; Employment [+] Show more

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## Collections

- Landmark reports
- Research and policy by region
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#### Australian landmark reports

National VET reports State/Territory VET reports National HE reports



#### **ANTA** collection

ANTA was an Australian government statutory authority from 1992-2005 to provide a national focus for vocational education and training. ANTA resources can be accessed through VOCEDplus.



#### Key conferences

This page lists key conferences in the tertiary education sector with links to conference proceedings and selected papers in VOCEDplus.



#### Key research and policy by region

Tertiary education policy and research from various regions of the world.



#### Literacy and numeracy resources

ALNP collection WELL collection



#### **NCVER Communities of Practice**

This collection brings together the published papers from NCVER's Community of Practice program, Academic Scholarship program, and the Building Researcher Capacity initiative.



#### Pathways for practitioners

This collection is part of practical action to improve transition pathways between VET and higher education. It includes pathwaysrelated resources and an online user community.



#### Reframing the Future collection

All Reframing the Future publications Core idea publications



#### Thesis collection

This collection aims to bring together theses on various topics in tertiary education.



#### **UNESCO/UNEVOC** collection

Here users can find resources published by or on behalf of UNEVOC, UNESCO's International Centre for Technical and Vocational Education and Training.

#### Statistical resources



#### Australian vocational education and training data (NCVER)



#### Apprentice and trainee destinations

Current release



Current release Archived releases



Current releases - Infographics Archived pocket guides



Current release Archived releases

### ✓ Equity groups

Archived releases (Indigenous students and Students with a disability)



#### Student intentions

Current releases



#### Student outcomes

Current release Archived releases



#### Tertiary education and training in Australia

Current release



#### Total VET students and courses

Current release



#### **VET** finance

Current releases Archived releases

### Key international statistical data and publications

Eurostat statistics [selected databases]

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- Education at a glance: OECD indicators
- Education for all: global monitoring report [UNESCO]
- Global education digest: comparing statistics across the world [UNESCO]
- Key data on education in Europe [Eurostat]
- Key data on higher education in Europe [Eurostat]
- Key indicators of the labour market [ILO]
- · Labour force statistics [OECD]
- OECD employment outlook
- OECD Programme for International Student Assessment (PISA)

See more statistical resources in VOCEDplus.

### Key statistical organisations and resources

- Australian Bureau of Statistics
- data.gov.au
- · data.gov.uk
- Eurostat
- International Labour Organization (ILO) statistics and databases
- · OECD statistics





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#### Focus on Higher level apprenticeships pathways

#### Industry 4.0

Building on the third industrial revolution, which used electronics and information technology to automate production, the fourth industrial revolution (Industry 4.0) is the next phase in the digitisation of the manufacturing sector. It is driven by several factors: the rise in data volumes, computational power, and connectivity, the emergence of analytics and business-intelligence capabilities; new forms of human-machine interaction such as touch interfaces and augmented reality systems; and improvements in transferring digital instructions to the physical world, such as advance robotics and 3D printing (Source: Manufacturing's next act, McKinsey, 2015)

The emergence of Industry 4 0 is transforming the labour market. For example, with the digitisation of the product development process, we are seeing design, production planning, engineering, manufacturing and services merging into one unit, instead of being equential ... advanced manufacturing requires new and advanced skill sets' (Source: Advanced manufacturing: beyond the production line, CEDA, 2014, p. 5).

Apprenticeships offer a critical supply of skilled labour to industry and their enduring contribution is based on the commitment of employers and apprentices and their adaptability (Source: Laying the foundations for apprenticeship reform, NSW Business Chamber, 2016). It's the latter factor in particular, which make apprenticeships ideal for the diffusion of higher skills for emerging high tech jobs.

#### More on this

- · Amplifying human potential: education and skills for the fourth industrial revolution [international, 2016]
- How to create skills for an emerging industry: the case of technician skills and training in cell therapy [UK, 2017]
- Man and machine in Industry 4.0: how will technology transform the industrial workforce through 2025? [Germany, 2015]
- · Realizing human potential in the fourth industrial revolution: an agenda for leaders to shape the future of education, gender and work [2017]
- . The digital revolution: the impact of the fourth industrial revolution on employment and education [UK, 2016]
- The future of Australian apprenticeships: report of the stakeholder forum [2017]
- The future of jobs: employment, skills and workforce strategy for the fourth industrial revolution [international, 2016]

#### Higher level apprenticeships

The higher-level apprenticeship is **not** a **new concept**. Indeed, in 1995, North Carolina in the US implemented Apprenticeships 2000, a four-year technical training partnership that offered selected high school students a guaranteed job with a partnering company in the advanced manufacturing industry. In the United Kingdom (UK), the potential benefits of opening up progression routes from work-based education to higher education were identified by the late 1990s. It was reinforced in the 2001 report of the Modern Apprenticeship Advisory Committee, *Modern Apprenticeships: the way* to work, which proposed that 'the national framework should refer to the opportunities for apprentices to progress into higher education, whether immediately after or even during an advanced modern apprenticeship.

#### More on this

- · Higher apprenticeships and the shaping of vocational knowledge [international, 2015]
- . Higher apprenticeships: completing the map [UK, 2016]
- · Higher apprenticeships in England: professional and vocational formation [2015]
- . The potential for Higher Apprenticeships: research report [UK, 2013]

#### Defining higher level apprenticeships

In the UK, degree apprenticeships are a **new apprenticeship model** that combines university study with on-the-job training typical of apprenticeships leading to a full Bachelors' or Masters' degree.

In Australia, the first pilots of higher-level apprenticeships suggest this model combines higher-level vocational qualifications (Diploma and Associate Degree level) and on-the-job training.

In Europe, countries like Germany, Austria, Switzerland, Denmark, France and the Netherlands that have strong vocational education and training systems, apprenticeships have largely been separate from higher education. However, as elsewhere in the world, work-based academic education is on the rise, fuelled by an increasing demand for higher level skills. The rise of work-based academic education in Austria, Germany and Switzerland provides a comparative analysis of how the institutional divide between vocational and higher education is being addressed through the development of hybrid models of advanced work-based academic education that combine vocational training with higher education.

#### More on this.

- . Advanced and higher vocational education in Scotland: recontextualising the provision of HE in FE [2016]
- Degree apprenticeships: realising opportunities [UK, 2017]
- Degree apprenticeships: higher technical or technical higher (education)? [UK, 2016]
- · Engineering facilities in further education colleges in England [2016]
- The future of higher vocational education: advanced apprenticeships: uniting universities and industry in manufacturing the UK's economic future [2015]

#### Recent initiatives

In 2013, the UK Government began significant reforms of its apprenticeship system based on recommendations from *The Richard review of apprenticeships*. With the release of the UK Government's response paper *The future of apprenticeships* in England: implementation plan, eight new trailblazer apprenticeships is encountered to the UK Government's response paper. The future of apprenticeship in England: implementation plan, eight new trailblazer apprenticeships is training by designing new apprenticeship standards for occupations within their sectors. These new standards include new higher and degree apprenticeships ranging from Level 4 Foundation Degree or Higher National Diploma to Level 7 Masters' degree and postgraduate certificate and diploma, creating **new vocational pathways to higher level occupations** (Source: *Process evaluation of the Apprenticeship Trailblazers: final report*, UK Department for Business, Innovation and Skills, 2015). Degree level apprenticeships are available in a range of sectors, including Business and IT, Construction, Manufacturing, processing and logistics, Energy, and Engineering and electrical systems.

One expectation of Trailblazers, reported in Evaluation of the Apprenticeship Trailblazers: interim report, is that they will create entry and progression routes for young people, providing alternative pathways to higher level qualifications. Information about the regulation and approval of apprenticeship is standards for higher-level and degree apprenticeships is set out in the Post-16 Skills Plant.

In Australia, the Victorian State Government commissioned a report to test demand for higher apprenticeship options with local industries in 2012. It found that while the current system did not necessarily preclude high achievers and motivated individuals from obtaining rewarding and fulfilling trade careers, more could be done to broaden the scope, awareness and take up of these opportunities.



Current 'Focus on...' page

#### Industrial revolutions

The first industrial revolution was the mechanisation of production using water and steam power. The second used electric power to create mass production. The third used electronics and information technology to automate production. Now a fourth industrial revolution is building on the third, the digital revolution that has been occurring since the middle of the last century (Source: World Economic Forum, 2016).

#### Media

Why everyone's talking about degree apprenticeships (Source: The Tech Partnership, YouTube, February 2017)



Everything you need to know about higher and degree apprenticeships (Source: Staffordshire University, YouTube, December 2016)



The changing landscape of apprenticeships (Source: ILM, YouTube, July 2016)



Did you know parents prefer degree apprenticeships to an Oxbridge education? (Source: Chartered Management Institute, YouTube, March 2016)





### Focus on

Single, theme based pages containing:

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- Resources
- Research
- VOCEDplus links
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- Parity of esteem



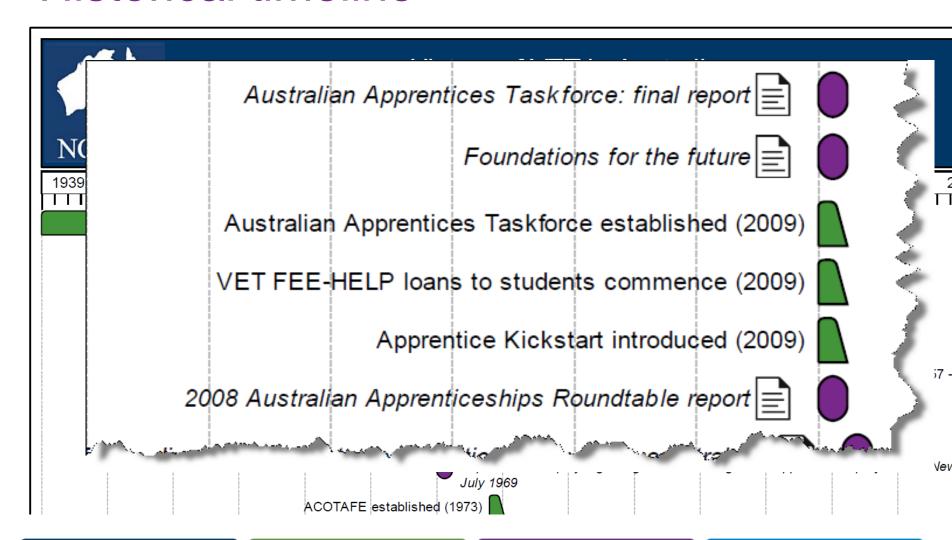


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Focus on		Glossary of V	ET	Pod Network	Subjects and keywords	Tin	nelines	VET Knowledge Bank	





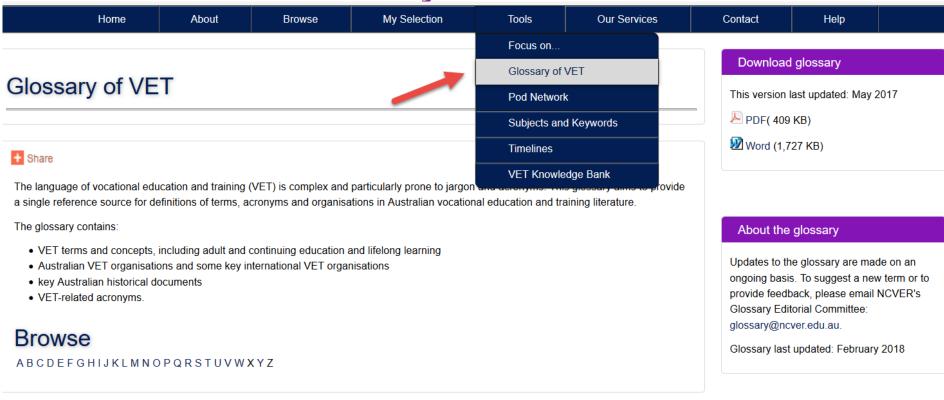
## Historical timeline







# Glossary of VET



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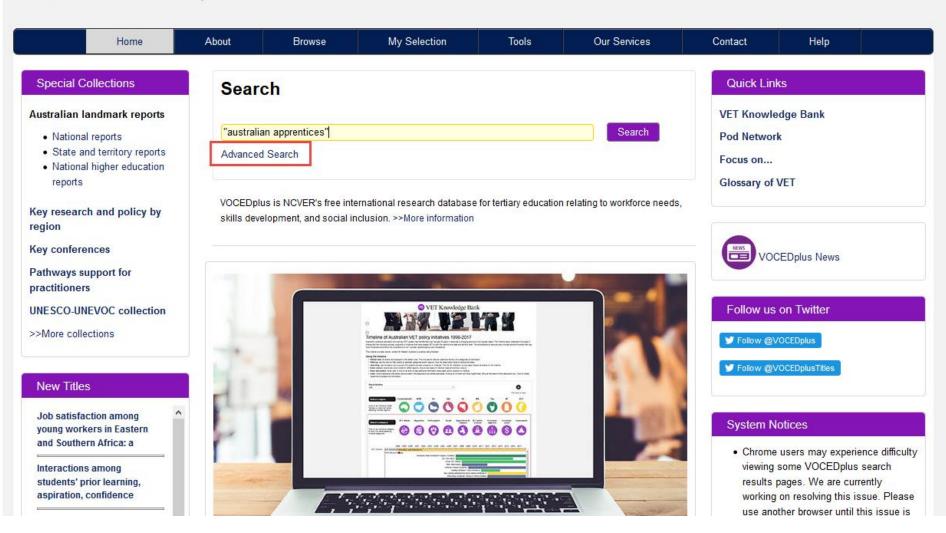
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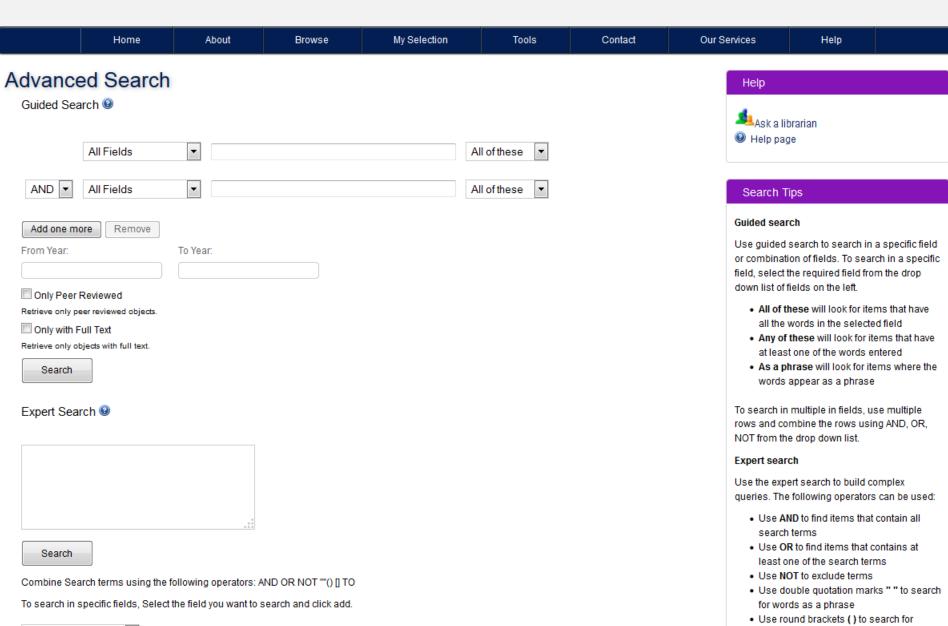
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Filter by geographic

Date: 2009

Resource type: Guide

Geographic subjects: Oceania; Australia; Western Australia





#### Filter by authors:

- National Centre for Vocational Education Research (NCVER) (239)
- Australian National Training Authority (ANTA) (61)
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- Polesel, John (22)
- Karmel, Tom (21)

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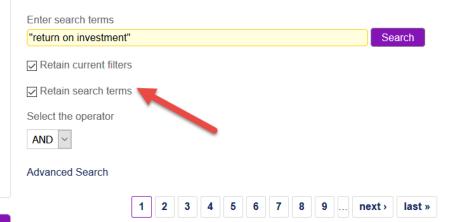
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- Vocational education and training (909)
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- Outcomes of education and training (524)
- Future (293)

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Search found 1696 items

- All Fields:(apprentices OR apprenticeships OR apprenticeship) AND Geographic subject:(australia)
- (-) Outcomes

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### Australian apprenticeships: facts, fiction and future

Apprenticeships are the oldest and most resilient form of post-school education and training,

accounting for... [+] Show more

Corporate author: National Centre for Vocational Education Research (NCVER)

Date: 2001

Geographic subjects: Oceania; Australia

Resource type: Book

Subjects: Youth; Evaluation; Labour market [+] Show more

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## Apprenticeship and Traineeship Taskforce report: meeting the employment based training needs of Western Australia

This report was established to provide advice to increase the takeup of apprenticeships and traineeships. The I+1 Show more





### Filter by authors:

- National Centre for Vocational Education Research (NCVER)
   (5)
- Australian National Training Authority (ANTA) (3)
- Australian Industry Group (2)
- Group Training Australia (GTA)(2)
- Hargreaves, Jo (2)

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### Filter by subjects:

- o (-) Outcomes
- Skills and knowledge (37)
- Employment (31)
- Vocational education and training (31)
- Research (26)

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### Filter by keywords:

- Skill development (22)
- Recommendations (17)
- Future (9)
- Outcomes of education and training (9)

## Search Results

Enter search terms

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Advanced Search

1 2 3 4 5 6 next > last >

#### The changing nature of apprenticeships: 1996-2016

This research summary provides evidence of the changing nature of apprenticeships over a 20 year

period (1996-2016... [+] Show more

Authors: Hargreaves, Jo; Stanwick, John; Skujins, Peta

Date: 2017

Geographic subjects: Oceania; Australia

Resource type: Report

Subjects: Apprenticeship; Traineeship; Vocational education and training [+] Show more

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## Engineering apprentices: review of qualification completions in engineering trades apprenticeships

 $\label{eq:ACIL} \textbf{Allen Consulting in partnership with the National Centre for Vocational Education Research}$ 

(NCVER) was... [+] Show more

Corporate author: National Centre for Vocational Education Research (NCVER)

**ACIL Allen Consulting** 

Date: 2014

Geographic subjects: Australia; Oceania

#### Current search

Search found 59 items

- All Fields:(apprentices OR apprenticeships OR apprenticeship AND "return on investment") AND Geographic subject:(australia)
- o (-) Outcomes

#### Sort by

Subscribe 5

- Relevancy
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Combine Search terms using the following operators: AND OR NOT ""() [] TO

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Year published 🔽 Add





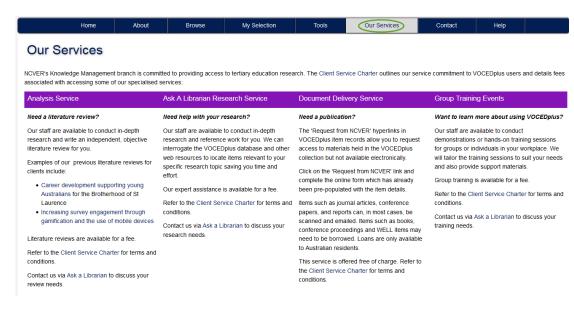
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# Research expertise

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