
A snapshot of a selection of items added to VOCEDplus

DECEMBER 2022 / JANUARY 2023

The [full list](#) of new additions to VOCEDplus is available at www.voced.edu.au

The broad range of practices captured in the online delivery mode, and its rapid evolution, have contributed to a definition of online learning that is no longer fit for purpose - this can impact on the collection of accurate and meaningful data on sector activity and performance

The five Cs - Care, Computing, Cognitive abilities, Communicate and Climate - are key future skills needs

Strategic review of online learning in VET in Australia

Strategic review of online learning: final report / Australian Skills Quality Authority (ASQA).

Melbourne, Victoria: ASQA, 2023. iii, 56 pages.

The Strategic Review of Online Learning in the vocational education and training (VET) sector was undertaken to analyse the opportunities and risks of online learning and to identify the nature of their regulatory response. The review engaged with students through focus groups and implemented a provider survey of the VET sector's use, experience, and perceptions of online learning jointly administered with the National Centre for Vocational Education Research (NCVER). The review found that whilst quality VET can be delivered online, taking into consideration the requirements of the training product, the student cohort, the skills of the trainer and assessor, and the tools, technologies, and processes for delivering online, the challenges, opportunities and risks vary depending on those factors. There is no single issue or feature that is an indicator of greater or lesser risk to quality.

[Download the PDF](#)

Current, emerging and future workforce skills needs in Australia

Australia's current, emerging and future workforce skills needs / National Skills Commission.

Canberra, Australian Capital Territory: Department of Employment and Workplace Relations, 2022. 86 pages.

Over the past year, labour market conditions have strengthened substantially although the pattern of growth has been uneven across industries, occupations, and skill levels. Employment growth across industries, for example, has been driven for the most part by just five of the 19 broad industry groups, namely Health Care and Social Assistance, Professional Scientific and Technical Services, Retail Trade, Construction and Financial and Insurance Services. The increasing importance of responding to climate change is highlighted in this report in initial insights into the jobs and skills that will be required as Australia transitions to a net zero carbon economy. Looking further ahead the transition to a net zero carbon economy and the impacts of climate change are likely to have a significant impact on future skills needs.

[Download the PDF](#)

The partnership between employers and community colleges is currently not fit for the purpose of creating America's workforce

'Unmet need' is defined as the gap between the social and green jobs in most economies today and the number of social and green jobs that could help countries achieve inclusion and emissions reduction aspirations in 2030

It is the least qualified workers who are both the most exposed to deteriorating working and employment conditions and, paradoxically, the least inclined to think of retraining in response

Community colleges and employers in the US

The partnership imperative: community colleges, employers, and America's chronic skills gap / Joseph B. Fuller and Manjari Raman.

Boston, Massachusetts: Harvard Business School Publishing, 2022. 81 pages.

To close America's chronic middle skills gap, US employers have to partner much more actively than in the past with local community colleges. Due to waves of disruptive automation, the nature of middle skills jobs is evolving much faster than educators' abilities to change curriculum. Surveys of educators and employers reveal the disconnect behind this partnership's underperformance and underscore the need for businesses to take the lead in making it more relevant and effective in three areas: training and education aligned with industry needs, commitments to hire community college students, and sharing of data on the supply and demand for talent.

[Download the PDF](#)

Social and green jobs for the future

Jobs of tomorrow: social and green jobs for building inclusive and sustainable economies / World Economic Forum Centre for the New Economy and Society and Accenture.

Geneva, Switzerland: World Economic Forum, 2023. 24 pages.

More social jobs, those in the education, healthcare and care sectors, can help address social mobility and human capital issues. Similarly, more green jobs are essential for enabling an environmental transition. This paper calculates the additional social jobs and green jobs needed to progress social mobility and the green transition by 2030, across 10 major economies: Australia, Brazil, China, Germany, India, Japan, South Africa, Spain, the United Kingdom and the United States. This assessment of the needed increase in social and green jobs is a call to action for businesses and governments, to invest in job creation and training for these jobs, to help create more inclusive and sustainable economies and societies around the world.

[Download the PDF](#)

Unskilled workers and retraining in France

Retraining is hard work!: a survey of unskilled workers / Camille Stephanus and Josiane Vero.

Training and employment, number 156, 2022, pages 1-4.

The question of retraining lies at the heart of current employment policy issues. However, wanting to change occupation is no guarantee of completing a retraining programme, even less of finding a job. While low-skilled blue- and white-collar workers are the ones most likely to seek a change, they are also the ones who benefit least from a retraining programme. Workers' desires to retrain are also driven by different motivations depending on their socio-occupational category: it may be an enforced reaction to the ups and downs of working life, a rejection of downgrading and deteriorating working and employment conditions or a search for meaning.

[Download the PDF](#)

Submissions close

Friday 10 February 2023
at 5pm AEDT

The study results indicate that the VR painting shop could be established as part of the vocational training and, in the long term, also be embedded into the curricula

Jobs and Skills Australia

Jobs and Skills Australia: discussion paper / Department of Employment and Workplace Relations (DEWR).

Canberra, Australian Capital Territory: Department of Employment and Workplace Relations, 2023. 14 pages.

The Jobs and Skills Australia Bill 2022 passed on 27 October 2022, establishing Jobs and Skills Australia (JSA) to provide advice to government on current and emerging workforce needs in order to meet the skills needs of the economy. This discussion paper is an opportunity for interested parties to provide their views to the Australian Government about the ongoing arrangements of JSA, ahead of permanent arrangements being finalised. The discussion paper is focused on the areas of functions and ways of working for JSA's ongoing operations.

[Download the PDF](#)

Virtual reality in vocational training – a case study

Virtual reality in vocational training: a study demonstrating the potential of a VR-based vehicle painting simulator for skills acquisition in apprenticeship training / Miriam Mulders, Josef Buchner and Michael Kerres.

Technology, knowledge and learning, preprint article first published online in November 2022 by Springer Nature Switzerland AG.

Previous studies on virtual reality (VR)-enriched learning pointed out the advantages of immersive learning for the development of competencies. In the context of vocational education in vehicle painting, training opportunities are severely limited for many reasons. VR can be utilised to develop a comprehensive learning environment with authentic training tasks. Besides the need to train psychomotor skills, vehicle painting procedures are complex tasks requiring incremental training to develop knowledge, skills, and attitudes. This study aims to evaluate a VR training application for vehicle painting, focusing on the development of professional competencies regarding skills, knowledge, and attitudes. 47 apprentices participated in the evaluation study. A VR-simulated painting booth was developed based on the 4 C/ID model by van Merriënboer, where they dealt with typical painting jobs on three dimensional (3D) workpieces (e.g., car wings, engine hood). The training application supports the acquisition of skills, knowledge, and attitudes equally. Further results regarding usability, cognitive load, etc., are promising. The essential finding of this study is that the VR training application is generally suitable for supporting craftsmanship within the field of vehicle painting. Since training opportunities for apprentices in this context are often rare, VR offers a unique solution especially for skills training if it follows a proven instructional model for the development of competencies.

[Download the PDF](#)



Prepared by Tracy Gamlin, Research Librarian, Knowledge Management Branch, National Centre for Vocational Education Research (NCVER).

Feedback and questions to TracyGamlin@ncver.edu.au

VOCEDplus is produced by NCVER with funding support from the Australian Government Department of Employment and Workplace Relations.



[Follow @VOCEDplus](#)

www.voced.edu.au