

A snapshot of a selection of items added to VOCEDplus

SEPTEMBER 2016

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

More research and better data are needed to understand the mix of factors that ultimately account for success in high school science and math

STEM pathways from school to university

Understanding the STEM path through high school and into university programs / Martin D. Dooley, A. Abigail Payne, Mitchell Steffler and Jessica Wagner.

Toronto: Canada: Higher Education Quality Council of Ontario, 2016. 21 pages (report) + 6 pages (appendix).

Preparation for a STEM career requires students both to take the appropriate courses in high school and to apply to and register in a postsecondary STEM program. This paper examines a series of questions concerning persistence on the STEM path in Ontario, Canada high schools. The study is based on two administrative data sets on the high school performance of individual students, as well as the university programs they apply to and in which they register. The data track the students for five years and also include information on gender, birth year, home postal code and place of birth. The greatest predictor of whether students stay on a STEM path is academic performance. Non-academic factors, such as gender, place of birth, average family income and other neighbourhood characteristics, play predictable but smaller roles in application and registration decisions.

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Youth policy analysis - Australia

Investing in youth: Australia / Organisation for Economic Co-operation and Development.

Paris, France: OECD, 2016. 290 pages.

This report provides a detailed diagnosis of youth policies in the area of education, training, social and employment policies. Its main focus is on disengaged or at-risk of disengaged youth. The report presents new results from a statistical analysis of the situation of disadvantaged youth in Australia using various sources of survey-based and administrative data. It analyses the youth labour market and education system in Australia from an international comparative perspective, and offers context-specific recommendations to help improve school-to-work transitions. It also provides an opportunity for other countries to learn from the innovative measures that Australia has taken to strengthen the skills of youth and their employment outcomes.

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Young people with low educational attainment face a particularly high risk of joining the ranks of 'not in employment, education or training' (NEET)

Youth entrepreneurship can play an important part in facilitating economic development and job creation

The role of TVET in youth entrepreneurship

Making youth entrepreneurship a viable path: how can TVET institutions help promote entrepreneurship / moderated by Claudia Pompa.

Bonn, Germany: UNESCO-UNEVOC, 2016. 23 pages (report) + 4 pages (summary).

This virtual conference involved 146 participants from 58 countries and sought to collect input from the wider technical and vocational education and training (TVET) community about the role of TVET in promoting youth entrepreneurship. In order to increase understanding of the nature of entrepreneurship, as well as the obstacles young entrepreneurs face, the virtual conference addressed the following questions: What are some of the key challenges that young entrepreneurs, in different markets and from different backgrounds, face? How can programmes or policies help them address those challenges? What are the key skills that young entrepreneurs need to develop in order to be able to run successful ventures? What role can TVET providers play in helping develop some of those skills? What are some key best practices that can be identified when implementing youth entrepreneurship programmes? The report identifies four areas that need to be explored further. These are: (1) designing 'fit for purpose' entrepreneurship programmes that promote creativity and innovation as part of the curricula; (2) providing training and support to teachers and trainers interested in developing an entrepreneurial curricula; (3) designing and implementing effective mentoring programmes with strong linkages to the private sector; and (4) ensuring that experiences, practices and learning are regularly shared among trainers and practitioners.

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History of the TVET system in Aotearoa, New Zealand

A whakapapa of technical, trade and vocational education in Aotearoa, New Zealand: origins of a hybrid VET system / Lisa Maurice-Takerei.

Auckland, New Zealand: Unitec Institute of Technology, 2016. 45 pages.

This report provides a short history that discusses some of the changes, transformations and tensions from which [technical and vocational education and training] TVET and in particular trade-related education in New Zealand has arisen. In terms of a 'whakapapa' the TVET system in New Zealand has burgeoned from industry and workforce need, economic, social and labour force requirements and goals, and through varying apprenticeship, schooling and education, social development and industry systems and structures. Sometimes these systems and goals were in conflict and sometimes they worked in co-operation. The aim of this report is to better understand the often-opaque environment in which TVET operates in New Zealand. It is part of a broader doctoral thesis, which explores the work of trade tutors in New Zealand polytechnics.

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This whakapapa, or genealogy, of New Zealand's dynamic TVET sector reveals it has grown, despite setbacks, in the gaps left by schools and universities

Growth in the demand for health workers will be highest among upper-middle-income countries, driven by economic growth and population growth and ageing

Available data suggests ACE is playing an important role in educating many adult Australians, in particular those who are disadvantaged

Future skill shortages in the health workforce

Global health workforce labor market projections for 2030 / Jenny X. Liu, Yevgeniy Goryakin, Akiko Maeda, Tim Bruckner and Richard Scheffler.

Washington, District of Columbia: World Bank, 2016. 38 pages.

In low- and middle-income countries, scaling essential health interventions to achieve health development targets is constrained by the lack of skilled health professionals to deliver services. This paper takes a labor market approach to project future health workforce demand based on an economic model that projects economic growth, demographics, and health coverage, and using health workforce data (1990-2013) for 165 countries from the World Health Organization's Global Health Observatory. The demand projections are compared with the projected growth in health worker supply and health worker 'needs' as estimated by the World Health Organization to achieve essential health coverage. The model predicts that by 2030 global demand for health workers will rise to 80 million workers, double the current (2013) stock of health workers. The supply of health workers is expected to reach 65 million over the same period, resulting in a worldwide shortage of 15 million health workers.

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Adult and community education (ACE) in Australia

Australian ACE environmental scan research project 2016 / Kaye Bowman.

Footscray, Victoria: Adult Learning Australia, 2016. 53 pages.

This report has been prepared to raise awareness and understanding of adult and community education (ACE) in Australia. It profiles Australian ACE in terms of its distinctive features, current scope and scale of providers and programs, and for each program their participants and outcomes achieved and key national policies supported. Trends in Australian ACE programs, participants and outcomes over the past five to 10 years are also included where comparable data is available to help identify challenges facing their sustainability. Key findings include that: (1) ACE is a discrete fourth sector of education in Australia committed to providing accessible learning opportunities for adults in local communities that meet their needs and support place-based community development; (2) there is a high literacy challenge in Australia that ACE providers are responding to; and (3) ACE providers in the formal vocational education and training (VET) system serve a generic role and a value-adding role: the generic role is to offer VET to all adults; and the value-adding role is to bring in its distinctive qualities and unique delivery method primarily to assist disadvantaged students into and through the VET system.

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VOCEDplus is produced by NCVER with funding support from the Australian Department of Education and Training.



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