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## ► **VOCEDplus and Open Access: An Ideal Relationship**

### **1 Introduction**

VOCEDplus<sup>1</sup> is a unique collection of English-language research, policy and statistics related to international tertiary education, with a strong focus on vocational education and training (VET). VOCEDplus is maintained and developed by the National Centre for Vocational Education Research (NCVER), based in Adelaide, South Australia. Open Access (OA) has revolutionised how users can access publications held in our collection and has dramatically improved access to research. OA for us includes both digitised hard copy publications and digital publications released as OA.

VOCEDplus is funded by Australian Commonwealth, State and Territory Governments and is endorsed by the UNESCO-UNEVOC International Centre in Bonn, Germany. People are always pleasantly surprised to learn that VOCEDplus is free to use – free to search and free to download OA publications. There is also a free document delivery service for publications not currently available through OA. Requests are subject to copyright restrictions and weekly maximum limits. Users do not need to create an account, log in or remember a password to access VOCEDplus.

VOCEDplus is designed to capture and share research, and the principles of OA mirror the goals of VOCEDplus – free, available 24/7, equity of access, sharing of knowledge between people regardless of their geographic location, and greater exposure for authors and their research.

### **2 History of VOCEDplus**

The Australian Technical and Further Education (TAFE) Clearinghouse system was established by the Conference of Directors of Technical and Further Education in November 1978.

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1 <https://www.voced.edu.au> (last access 30 June 2022).

Every Australian state and territory had a clearinghouse and the National Clearinghouse was in South Australia at the TAFE National Centre for Research and Development (now NCVER). The network was set up to share information about activities in the TAFE sector throughout the Asia-Pacific region. The network was also designed to provide TAFE personnel across Australia with greater access to TAFE materials, in particular those of an innovative kind.

The National Clearinghouse was responsible for co-ordinating the system and for entering information about all of the new accessions around the country into an online computer system, the Australian Information Network (AUSINET), and into a hard copy publication entitled *Initiatives in Technical and Further Education*. The first issue was released in 1980, followed by new issues twice a year. This publication provided a list and description of each new publication added to the various collections held across the network. One of its key objectives was to provide the opportunity for material produced by TAFE staff to be disseminated on a national basis.

*Initiatives in Technical and Further Education* also included subject and author indices – a rudimentary search aid. Hard copies were distributed free of charge to the State and Territory clearinghouses, TAFE college libraries, TAFE head office personnel and some Industry Training committees and government departments. Listed publications were made available either by purchase, inter library loan, photocopy or microfiche, usually from the originating State or Territory clearinghouse. Inter library loans and photocopies were free only to TAFE personnel and nominal charges applied to other requestors.

VOCED came into existence in September 1989 when two existing hard copy publications, *Initiatives in Technical and Further Education* and *TAFE Projects in Progress*, were incorporated to become the Vocational Education and Training Research Database (commonly known as VOCED). VOCED was produced in an electronic version (distributed on diskette) as well as hard copy, with quarterly updates. Generally, access to listed publications was still limited to people within Australia.

In 1997, the first web version of VOCED was made available from the NCVER organisational website. 1998 saw the commencement of a major project to upgrade the database and expand its coverage of both Australian and international technical and vocational education and training (TVET) information. More than 100 journals from Australia and overseas were identified and acquired for inclusion in the database. Key international producers of information in the field were also identified and relevant publications acquired.

2001 saw the creation of VOCED's own website. For the first time VOCED was a unique, stand-alone entity that allowed anyone anywhere in the world with a computer and internet access to easily search the database. While being able to search the bibliographic details of all publications held in the collection was a good step forward, actually requesting and receiving a copy of a publication of interest was still not a quick process. Photocopying and posting copies or loaning reports was possible but the turnaround time was days and loans were only permitted to requestors within Australia.

In 2007, a project to reconceptualise the clearinghouse network was completed with the transfer of most of the clearinghouse collections to NCVER, to form a centralised repository of resources. A commitment was made to digitise as much of the VOCED collection as possible and to develop the VOCED database as an archival repository for both Australian and international VET research, policy and practice. This work began in 2008 with a small pilot project to investigate the feasibility of digitising the non-commercial component of the hard copy library collection and making this material available via the VOCED database.

Over a period of 18 months between 2009 and 2011, NCVER undertook a major rebuild of the database and website. In April 2011, the new website was launched, with the new name VOCEDplus, to represent the enhanced features and extended focus encompassing workforce needs, skills development, and the higher education sector more fully.

VOCEDplus employs Vital repository software with a Drupal front-end for public online access. For the first time we had the technology to store and make publicly available full text publications and research materials in the full array of formats including PDFs, Microsoft Word, PowerPoint and Excel files, image files such as jpgs, sound files such as MP3s, and video files. We had at last made it possible for our users to access at least some of our held materials 24 hours a day, seven days a week instead of being completely reliant on someone from the VOCEDplus team to facilitate access to full text content. Also by this time, requests for publications not available through OA had shifted from photocopying and posting copies to scanning and emailing, which greatly improved turnaround times.

A further large-scale outsourced digitisation initiative was completed in 2012. This project covered all NCVER publications not born digital, as well as the conversion of thousands of publications from microfiche format to PDF.

Skipping ahead to December 2021, VOCEDplus contains the bibliographic details of more than 90,500 publications, of which approximately 49,200 (54%) are available via OA for immediate download. The digitisation of non-commercial publications is continuing on an ad hoc basis.

The development of three affordable technologies have been instrumental in making access to OA research held in VOCEDplus possible:

- ▶ Inhouse copiers with excellent scanning capabilities to produce high quality digital versions of publications not born digital
- ▶ Image processing software including Adobe Acrobat and Adobe Photoshop to clean up and OCR scans
- ▶ Repository software to hold all the bibliographic data, metadata, and full text files.

### 3 Three Key Benefits of Open Access for VOCEDplus and Researchers

#### 3.1 Collection Development

OA has been integral for the continued growth and success of VOCEDplus. We have been able to take a relatively small hard copy collection, grow it enormously and share it with the world. Initial perceptions that free OA publications equated to poor quality are long gone and we are pleased that OA publications are now generally of a high quality, and that journal articles are often peer-reviewed, and therefore an excellent fit for VOCEDplus.

We hand choose everything that is added to VOCEDplus. OA publications are considered for inclusion into VOCEDplus on exactly the same criteria as hard copy and commercial publications. Some of the relevant major publishers like Wiley, Taylor & Francis, and Springer have a mix of subscription and OA content and VOCEDplus includes both.

OA is an excellent tool for growing the VOCEDplus collection. While we continue to purchase core journals from commercial publishers, OA lets us build the VOCEDplus collection with high quality articles published in journals we would not normally subscribe to. OA makes it possible for us to collect relevant articles from journals that would not have met our collection development criteria but do occasionally publish articles that are a perfect fit for VOCEDplus.

The growth in OA publishing has seen new relevant journals created which we monitor on a regular basis. OA allows us greater access to journals published outside of Australia which helps us to have more international content and improves the comprehensiveness of international research coverage in VOCEDplus. OA articles broaden our collection and increase the number of OA publications held.

OA also facilitates more timely access. We do not need to wait for a hard copy journal issue to arrive at our office for relevant articles to be added to VOCEDplus. OA also allows us access to pre-print articles so we can add them to VOCEDplus before they are even part of a specific journal issue.

#### 3.2 Preserving the Past

NCVER had traditionally released all of its research and statistical publications as hard copies available for purchase. In 2001, NCVER began releasing all publications as free OA PDFs, Microsoft Word documents and Excel files, available through the company website. The option to purchase hard copies continued until late 2009 when NCVER transitioned to a print on demand (POD) system. NCVER no longer automatically printed copies of publications but offered hard copies 'on demand' at the time a customer placed an order. Digital copies continued to be available online for free. Requests for POD copies dwindled as people became increasingly comfortable and satisfied with reading publications online or printing their own copy. The POD system ceased and NCVER became a completely digital OA publisher.

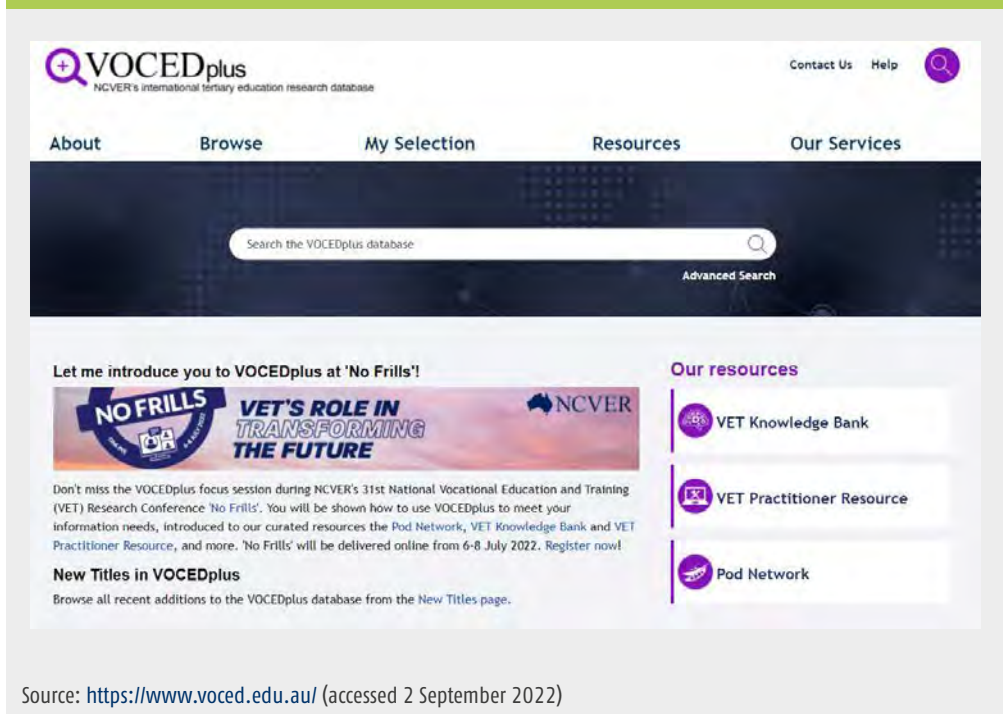
One of the core functions of VOCEDplus is to be the archive for all NCVER publications. VOCEDplus holds a digital copy of everything NCVER has published and thanks to digitisation efforts, even the older publications that were originally only released in hard copy are now available on OA. This corporate archive allows older research publications and superseded statistical releases to be removed from NCVER's website but not lost to researchers.

VOCEDplus also acts as a permanent archive for a broad range of grey literature, in particular publications by government departments and agencies that have a tendency to disappear from government websites but remain of interest and value to researchers. When new titles are added to VOCEDplus, we collect a copy of the OA publication and any supporting materials so they can be accessed through VOCEDplus in perpetuity.

The VOCEDplus document delivery service is helping us continue to digitise our hard copy collection. The number of VOCEDplus document delivery requests has declined overall during the past decade as more publications are available through OA. In 2011–2012 there were 2,810 document delivery requests and in 2020–2021 there were 940. These requests indicate publications of interest to users. Thus, if copyright permits, we digitise them 'on demand' and add the OA PDFs to VOCEDplus.

We have used our collection of OA publications to create a suite of value-added products on the VOCEDplus website. Our VET Knowledge Bank, in particular, has used a range of historically significant publications to tell the story of VET in Australia and provide access to digitised copies of the original hard copy publications. OA has transformed history that would have been locked away on a shelf to instead be instantly available.

Figure 1: VOCEDplus website



### 3.3 Discoverability

The Vital software facilitates the exposure of all VOCEDplus repository content, including full text publications, to Google via a MARCXML to XHTML conversion of metadata. Google crawls VOCEDplus help Google searches bring back VOCEDplus hits, usually at the top, or very high up in search results. Currently about half of our users come to VOCEDplus via web searches done outside of VOCEDplus – they benefit from VOCEDplus without having to know about VOCEDplus and coming directly to the VOCEDplus website to do their search. People may not always find the best information online on their own, so we are pleased that Google exposes VOCEDplus content to all internet users and helps them find quality information, and thereby enhances digital inclusion and access.

Being able to search in the full text of publications accelerates discovery. The seamless searching of full text publications within VOCEDplus gives researchers the best chance of finding the content they need. If they were limited to only the bibliographic details, relevant and useful publications might not be found.

The VOCEDplus Advanced Search – Guided Search option has an “Only with Full Text” checkbox to retrieve only publications with full text. This search criterion is useful for researchers seeking to immediately access the full text of publications that match their infor-

mation needs. The convenience of instant access cannot be overstated. VOCEDplus users are no longer limited to business hours in South Australia and can search for, discover and read publications any time of day or night anywhere in the world.

This instant availability is a boon for authors, too. If researchers can access their publications quickly and easily from VOCEDplus, it creates a win-win situation. Researchers have a wealth of information to work with and therefore use and cite in their own publication. For authors, their work is read more widely than if it was only accessible behind a paywall or available in hard copy and is therefore also much more likely to be cited and included in bibliographies of new research publications. By sharing and developing knowledge, the VET sector as a whole can benefit.

A potential downside in this era of online convenience is that high quality research that is not free or immediately available may be less likely to be accessed, read, used and cited. There is a concern that much valuable published information and knowledge is overlooked and dismissed simply because a little bit of effort is needed to access it, for example, the completion of a VOCEDplus document delivery request form. We have purchased some rather expensive books that are full of wonderful research but that are hardly ever used – a specific chapter may be requested but researchers are not using the whole book. It is to be hoped that researchers will not rely solely on research that is the fastest and cheapest available.

OA content in VOCEDplus also helps provide evidence of impact. VOCEDplus is a useful tool for conducting citation analysis. By searching for a specific title in VOCEDplus researchers can quickly and easily find other publications in VOCEDplus that have used that publication. NCVER regularly uses VOCEDplus to conduct citation analysis of its publications to demonstrate impact to stakeholders. Citation analysis can also highlight that OA publications are more likely to be cited than publications only available in hard copy, commercially or behind a paywall.

One of the core values of VOCEDplus is to provide access to research to anyone anywhere in the world, particularly in developing countries. Individuals and institutions that cannot afford to subscribe to commercial journals or purchase publications can have the same access to VET research held in VOCEDplus. Sharing, learning, and further developing research is in the best interests of everyone involved in the VET sector. OA positions researchers to have their work used to influence policy and practice. OA also gives taxpayers and other funders value for the money they have invested in researchers and research organisations.

## 4 The Future

VOCEDplus has a bright future thanks to OA. Researchers, especially digital natives, expect online content, increasingly doing their own research independent from physical libraries, and VOCEDplus will be there – providing online access and ensuring digital inclusion for all. If you have never used VOCEDplus, I strongly encourage you to come visit us online and see what you can find!