NCVER’S WEB SITE AND THE VOCEDE RESEARCH DATABASE

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Index: Vocational education and training; Database; Educational research; World Wide Web; Information dissemination; Information network

Abstract: This paper discusses the use that Australia’s National Centre for Vocational Education Research (NCVER) makes of the World Wide Web as a major platform in its dissemination of vocational education and training (VET) information, the importance of which was explored in the first paper. The session included a live demonstration of the web site, with a particular focus on the VOCED research database. Over the past year, NCVER has extensively upgraded its web site, to provide an integrated and sophisticated source of VET research and statistical information. During this period, the VOCED database has been significantly enhanced to become a leading international research tool, containing information about VET research and policy from Australian and international sources, from 1995, and indexing a wide range of key journals in the field.

INTRODUCTION

Chris Robinson, in the first paper of our symposium, made clear the importance placed by Australia’s National Centre for Vocational Education Research (NCVER) on the dissemination and utilisation of its research and statistical information about vocational education and training. For research to make a real difference and to have an impact on both policy and practice, the message about the research must get out to all those who need it. Getting this message out is as important as the production of the information by doing the research.

NCVER collects national statistics and undertakes and manages a large number of research projects each year. We thus hold a vast amount of research and statistical information about vocational education and training and have developed a range of strategies for getting this information out to the people who need it. One of the chief vehicles for delivering this message is the World Wide Web, which enables us to use a very flexible and powerful mechanism to deliver large amounts of information at a relatively small cost. The Web is the most effective way to reach a wide range of people, as it becomes increasingly more widely used, in Australia and in the rest of the world.

This session will outline our strategy for NCVER’s web site as a whole and then look particularly at our Vocational Education and Training Research Database (VOCED), which has undergone a major enhancement over the past year.

The approach we have adopted with the web site is to offer an integrated service, so that our users can find both research and statistical information about their specific topic or topics of interest. Users can browse by category, or can use a free text search across the whole site. Information is kept as current and up-to-date as possible, a very important advantage of web technology.

We take a continuous improvement approach to the web site as a whole and this session will demonstrate how we have implemented new features in VOCED in response to clients’ feedback. We seek responses from our users, and because the site is developed and produced in-house we are
able to respond to comments and add refinements. The site offers flexible and sophisticated searching mechanisms and is metadata driven for greater efficiency. An advantage of the web is that we are able to gather statistics about usage of the site, to monitor usage and see the growth in access.

This session will demonstrate features and services we have developed on the site as a whole and outline plans for future developments. The presenter will then look in detail at the VOCED Research Database, outlining the major enhancement project we have undertaken, and demonstrating the range of material now covered in this database as well as features of the search engine.

NCVER’S WEB SITE
http://www.ncver.edu.au

The following features will be demonstrated:

and to the key functions of the site. These links are maintained on each page of the site. All pages on the site follow the same clean design (to promote speed) and have the same ‘look and feel’ for coherence. Content is updated regularly. The mouseover feature allows extra information to be added without cluttering up the page. Address and contact details are provided on the front page – people shouldn’t have to delve too far for this information.

NCVER structure and corporate information. Information about the organisation’s aims, role and structure is provided, with photographs of managers and names and email contacts for key staff and functions.

NCVER news. Current and recent information is provided, with links to external sites where appropriate (contacts for conferences, etc). Email subscription to this newsletter is under development.

New web pages are featured so that regular visitors can quickly find changes.

Other key areas of the site: Library, Reading room, Bookshop, Links, Sitemap.

Research information. Research information is organised under themes, projects and currency, and can also be searched by key words. The master page for each research project contains links to all related information about that project, and also leads to further information about the research topic or the author. Increasingly, full text of publications (reports and papers) is available for download.

Statistical information. Statistical information is grouped under four main areas: national collections, surveys, selected topics and the AVETMIS Standard. Full text of many documents is available. It is planned to add metadata to all statistics pages (including tables and charts) on the web site so that they can be searched separately.

A full site search, from the sitemap area, will retrieve material about that topic from both the research and statistics areas, as well as other general information.

Further developments for the site as a whole include: increasing numbers of NCVER publications available in full for electronic download, in pdf format; an enhanced annotated VET links service, available as a searchable database; extension of the metadata used on the site, to incorporate all research and statistical information; online forums provided, based around particular topics of current interest; full online ordering service available from the bookshop; search facility added to the newsletter archives.
VOCED RESEARCH DATABASE: BACKGROUND

VOCED is produced at NCVER with the support of Australia’s national VET clearinghouse network. The network has existed for over 20 years, and was set up with the aim of avoiding unnecessary duplication of effort in technical and further education (TAFE) research. This aim of course remains a key focus of our work today. The TAFE Clearinghouse was modelled on the ERIC Clearinghouse concept, where information related to published and unpublished material (in this case about vocational education and training) is sent to a central point from various formal nodes as well as from individuals, thus forming an information network. The Clearinghouse started with six State and two Territory Clearinghouses, plus the National Clearinghouse. In 1989 the title of the network changed from National TAFE Clearinghouse to National Vocational Education and Training Clearinghouse, reflecting the increased coverage of the information beyond just TAFE to incorporate information from the entire VET sector. The **Vocational Education and Training Research Database (VOCED)**, also came into existence, incorporating the two existing hard copy publications (*Initiatives in TAFE* and *Projects in Progress*), and produced in an electronic version (distributed on diskette) as well as hard copy. Since then it has been produced quarterly, and now contains almost 15,000 records, of which about 4,500 are international entries.

The network itself has expanded to its present structure, consisting now of a Clearinghouse in each State and Territory, an adult education Clearinghouse based in the Council of Adult Education in Melbourne, a New Zealand Clearinghouse, a local UNEVOC Clearinghouse and the National Clearinghouse at NCVER. Each local Clearinghouse captures information on vocational education and training from its own area, houses the documents, sends abstracts, indexes and bibliographic information about the document or projects to the National Clearinghouse, ensures access to the documents themselves and distributes and promotes the database to its own constituency.

The National Clearinghouse at NCVER is responsible for producing the database from this information, maintaining its quality and consistency, capturing national information and other information not covered by the network, and co-ordinating the network as a whole. This system has worked with goodwill and a spirit of co-operation for 20 years. The Clearinghouse officers throughout the network are a highly committed group of people who are driven by a strong ethic of collaboration and information sharing, and this is one of the reasons for the successful continuation of this system.

The new developments in the Clearinghouse and database are building on a solid foundation developed over many years - the network is a well set-up and healthy co-operative venture, where all users benefit and can see that they benefit. The Australian TAFE systems which house the local Clearinghouses contribute to the network by providing time and labour; they benefit by having ready access to a mechanism for promoting their information, and for obtaining timely and relevant information themselves. As more TAFE institutes become interested in undertaking research, and in producing reports on their findings and on initiatives in their practices, they can see the benefits of being part of a national coordinated system for sharing this information.

The information contained in the database includes:

- research reports
- information about current research (projects in progress)
- conference papers
- theses
- journal articles
• policy documents
• government reports
• evaluation studies
• survey results
• published statistics
• bibliographies
• electronic documents

These are not kept in full text in the database, but are housed in the Clearinghouse, and for Australian users every document entered is available by some means (usually interlibrary loan) from a specified source. Wherever possible, a second point of availability is included so that international users are given a way of obtaining the full document. Increasingly, documents are available on the web, and where this is the case a link is made to the full document from within VOCED.

Each entry in the database contains a brief abstract or description of the document, an extremely valuable aspect of the database. Contact information is provided for current projects.

VOCED RESEARCH DATABASE: ENHANCEMENTS – RECENT, CURRENT, FUTURE

Access via the web

Enormous changes to the potential usefulness of the database resulted from mounting a web version. This has many benefits: users can have access from their own desktops, without relying on knowing that the system is installed in a library somewhere. They can use the mouse and hyperlink features, and cut and paste text. They can use the e-mail links to clearinghouses provided on the web site to request items and they can submit information to us about projects or documents online. It has become a truly interactive and accessible database. Our feedback from clients about the interface has been very positive, with very few enquiries about how to use it. We have provided help information and examples on the site. Our statistics kept over the first 18 months since VOCED was mounted on the Web showed a steady 400 actual searches performed each week. This initial high usage for such a specialised database has increased over the last year to an average of 800 searches a week, indicating the success of the enhanced service.

With VOCED on the web and readily accessible to all users around the world, we were poised to expand to become providers of a truly international tool, and to increase its coverage to include not just more Australian material but key international material as well.

Increasing coverage – becoming international

VOCED has grown from what was a national and somewhat limited, though useful, database, to become a leading international research tool for the field of VET. To increase coverage, we have been adopting a number of strategies.

Firstly, strategic alliances with relevant organisations, initially the 20 or so research centres which have been set up around Australia and are undertaking research into VET. The research context is very different now from when the Clearinghouse was first set up. Research is now not just done in the TAFE and training authorities, but in many specialised research centres, in universities and TAFE Institutes. NCVER has signed memoranda of understanding with over 20 of these centres,
whereby, among other areas of cooperation, we agree to exchange documents. This means that in exchange for all of our publications, these centres send us everything they publish, of relevance, and we can then include it in the database. This results in the capture of a significant portion of key Australian VET research material.

Secondly, NCVER now plays a central role in coordinating the dispersal of funds for the national managed research program, overseen by NREC, the National Research and Evaluation Committee. This means that as soon as a project contract is signed, we can put the project information into the database, and we also have speedy access to the published outcomes, for inclusion in the database. We liaise closely with the section managing the NREC funding so that we can gather this information quickly.

With these two strategies in place we are able to be far more proactive and ambitious about capturing Australian VET research information. Where before VOCED had many acknowledged and frustrating gaps in its coverage, we are now in a position to aim to be comprehensive for Australian research information.

As well as becoming more strategic in acquiring information, we have also become more focussed on the nature of our core information. VOCED contains information on VET policy and training systems, VET research, VET practice including “how to do it” information from practitioners, and published statistics (ie not raw data). We no longer include curriculum material, as we did to some extent in the past – this is too vast a field and there are other sources for this.

We have also set up similar MOUs with a number of international organisations, so that we can also be sure of capturing all their publications. These are at present: South East Asian Ministers of Education Organisation Regional Centre for Vocational and Technical Education (SEAMEO VOCTECH), Colombo Plan Technician Staff College (CPSC) in the Philippines, the Overseas Vocational Training Association (OVTA) in Japan and the Korean Research Institute for Vocational Education and Training (KRIVET). Further agreements with the European Centre for the Development of Vocational Training (CEDEFOP) and the German Federal Institute for Vocational Training (BIBB) have just been established and an agreement with the Central Institute of Technical and Vocational Education (CITVE) in China is about to be signed.

We have a very strong link with UNESCO’s UNEVOC program, including a local UNEVOC clearinghouse node, and are in the process of developing an agreement with Adelaide Institute of TAFE to become a joint regional UNEVOC Centre of Excellence, one of whose platforms would be the production of the VOCED database, as a vehicle for all VET research information published in English, for and from UNEVOC members.

Our strategy for acquiring information for VOCED is essentially a two-pronged approach. On the one hand, we make use of all of our networks: the Australian national clearinghouse network, the Australian research centres, the Australian national managed research program and the growing group of international partners, and the online submission mechanism, to acquire a wide range of material which is sent directly to us. This does mean we have a large amount of more obscure and rare documents, including unpublished papers and material from the Asia Pacific region which is unlikely to be held by any other database, and which is one of the great strengths of VOCED. On the other hand, to ensure the widest possible coverage, we have also strategically and systematically set about funding the acquisition of key material from a number of key sources.

**Journals**

In the past, VOCED did not routinely index many journals. Our coverage was sparse and sporadic. Now we have identified an initial set of key journals in the field and acquired them for the collection, backdated to the beginning of 1995. Our list of both Australian and international journals
is now over 130 titles, and we are constantly looking for new ones. We have added 10 new titles this year. The next stage of the project will include an evaluation and refinement of our core list of journals. We are always keen to receive feedback on this list, which is itself published on the web site, with each title linked to its entries in VOCED. The list itself is a valuable resource.

Monographic publications
Similarly, we have at the same time set up a process of identifying key international publishers and organisations which produce relevant monographic (single) publications in the field of VET research and policy. These include the obvious ones such as OECD, CEDEFOP, the ILO, NCRVE in the US, etc but we want to cast a much wider net and identify the key research organisations in the area in a wide range of countries. Again, any suggestions here would be warmly welcomed. I have a list of over 140 organisations at this stage, which we may put up on the web as a resource in a similar way to the journals list. Again, we are going back to 1995 for our acquisition of this material as well. Most of these organisations have web sites and will eventually be included in the “annotated VET links” section of our web site.

Implementation phases
The enhancement is taking place in two phases. The first phase, of identifying, acquiring and indexing the backdated material, is almost complete. It began in March 1999 and will be finished by the end of September 2000. We have ordered approximately 100 new journals, acquired the back issues to the beginning of 1995, and have indexed them, working from the most recent to the earliest. We have also acquired large numbers of international monographic publications (over 2,000) for indexing, from about 150 different international organisations so far.

We are using a team of in-house indexers to maintain our existing very high standard for entries. For VOCED to be a world class international database, it is crucial that the quality of the abstracts and the assignment of index terms are to the highest possible standard, and part of this project has involved the refinement and development of our existing standards and guidelines for data entry.

As well as the high quality of the entries, the range of its coverage, the fact that it is free to use and the backup document delivery service, VOCED has another significant advantage: its timeliness. Because we put the entries in ourselves at NCVER as soon as we receive the material, there is rarely a wait of more than three months (our upload period) before an entry appears in the database for a publication. This is in striking contrast to the time taken for material to appear in many other databases. We hope always to be able to maintain this currency of the items in VOCED, and we urge all users to send us information about projects and documents as soon as possible so that they can go up onto the web quickly.

The maintenance phase will continue after September 2000 with 2 full-time continuing indexing positions, a consolidated list of evaluated serials, and a list of target organisations to monitor for publications. Our strategy of alliances with various organisations to acquire their publications for the database will continue. We anticipate that VOCED will by then be an indispensable tool for VET research and a first port of call for anyone in Australia (and indeed the rest of the world) who is seeking information on vocational education and training research.

It is important additionally to note that VOCED not only provides a single point for Australian VET researchers, policy makers and practitioners to access international information, but also offers an opportunity for those in the Australian VET community to showcase their research and policy information. A search in VOCED now results in a consolidated set of results which is a mix of Australian and international material. In providing this tool, one of our aims is to enable Australian researchers more easily to cite international research in their own papers as well as to promote their
own work in the international arena. Australia has a thriving and focussed VET research program, which has much to offer the rest of the world, as well as much to learn from international research and policy material.

**Further refinements to the VOCED search**

Several refinements to the VOCED search mechanism have just been completed and we always welcome suggestions for more. One of the advantages of developing the tools in-house is that we can customise the search engine and be responsive to users’ comments, requests and suggestions.

The new improvements are:
- Truncation of the search term
- Linking the search to an online thesaurus for automatic checking of key terms
- Returning the set of entries retrieved in a format which is compatible with bibliographic programs such as EndNote.

These changes are complex in themselves, but they will make searches easier for the user, and we have made various decisions about how to present the new functionality in the search interface which need to be evaluated by our users.

Other planned changes are:
- Modification of searches by date
- Adding “pathfinders” to the web site
- Putting the thesaurus itself on the website for browsing and use by other sites, in particular for metadata
- Developing Z39.50 compliance so that VOCED can be compatible with other web databases and can more readily be part of internet gateway or portal sites

**DEMONSTRATION**

The second part of the workshop consisted of a demonstration of the VOCED research database on the web, with examples chosen to show different kinds of searches and the range of material now covered.

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