

E-learning for Target Learner Groups – Learners with Disabilities

**Policy and Research Program – An environmental scan
research paper to inform the 2005 E-Learning for Target
Learner Groups Project**

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Table of Contents

Executive summary	2
<i>Summary of ideas</i>	<i>3</i>
Project brief	5
<i>Background</i>	<i>5</i>
<i>Objective of the 2005 E-learning for Target Learner Groups Project</i>	<i>5</i>
<i>Project objective</i>	<i>6</i>
<i>Purpose of the 2004 E-learning for Target Learner Groups – learners with disabilities research project.....</i>	<i>6</i>
<i>Scope of brief</i>	<i>6</i>
What are we talking about?	7
<i>E-learning</i>	<i>7</i>
<i>Assistive Technology (AT)</i>	<i>7</i>
<i>How did we get here?.....</i>	<i>8</i>
<i>The 2005 Framework for VET Innovation – 2005 Framework Business Plan.....</i>	<i>8</i>
<i>Why focus on these Projects?.....</i>	<i>9</i>
<i>So what are the current 2005 Framework Projects?.....</i>	<i>9</i>
Who are we talking about?	15
How far have we come? <i>Contrasting reports on Assistive Technology in 1999 and 2002</i>.....	16
<i>Observations and reflections from findings – Part 1</i>	<i>19</i>
Design ‘for disabilities’ is bad design	20
What are the symptoms?	20
People with mobility impairments	21
People with hearing impairments and reading difficulties.....	21
People with vision impairments	21
Summary of common issues	22
<i>Observations and reflections from findings – Part 2</i>	<i>22</i>
<i>Final reflection</i>	<i>25</i>
Instructional design as an emerging discipline	25
Future readings.....	26
Carry out an environmental scan.....	27
<i>Identify key networks in States and Territories: The Australian Federation of Disability Organisations.</i>	<i>27</i>

National strategies – The Commonwealth Disability Strategy	32
<i>VET National Strategies: Shaping our future and projects outside the 2005 Framework – Reframing the Future</i>	<i>33</i>
National Disability Employment Initiatives (NDEI).....	35
<i>Australian Government Department of Employment and Workplace Relations (DEWR) 35</i>	
Personal Support Program (PSP).....	35
Disability employment assistance.....	36
Job Network.....	37
National Industry Association for Disability Services (ACROD)	37
Policy influence	37
Networking.....	37
<i>Department of Education, Science and Training (DEST)</i>	<i>37</i>
Jobs Pathway Program (JPP).....	37
National Regional Disability Liaison Officer (RDLO) Initiative	38
Disability Coordination Officer (DCO) Program	40
Job networks providers CRS Australia – vocational rehabilitation	43
<i>Disability Employment Action Centre (DEAC)</i>	<i>43</i>
Researchers conclusions – issues for learners with disabilities.....	47
<i>Summary of current issues for learners with disabilities in e-learning.....</i>	<i>47</i>
<i>Strategies/recommendations that improve employment opportunities for people with disabilities through the use of appropriate e-learning resources and technologies.....</i>	<i>47</i>
Appendix 1: List of National Peak Disability Bodies as recognised by FaCS	49
Appendix 2: Regions and contact details for Disability Coordination Officers (DCOs) and Regional Disability Liaison Officers (RDLOs).....	51
Appendix 3: Case Study results for TAFE WA (Challenger TAFE).....	57
Appendix 4: <i>Will This Help</i> CD-ROM: A Program of the Tasmanian RDLO Initiative .	60
Appendix 5: Project Resource CD-ROM	61
References	89
For more information	92

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Glossary

AAD	Australian Association of the Deaf
AARNet	Australian Academic Research Network
ABS	Australian Bureau of Statistics
ACROD	National Industry Association for Disability Services (<i>note: ACROD is no longer an accepted acronym.</i>)
ADHD	Attention Deficit Hyperactivity Disorder
ADCET	Australian Disability Clearinghouse on Education and Training
ADTAC	Australian Disability Training Advisory Council
AFDO	Australian Federation of Disability Organisations
AITAC	Australian Indigenous Training Advisory Council
ANTA	Australian National Training Authority
AQTF	Australian Quality Training Framework
AT	Assistive Technology
AVETMISS	Australian Vocational Education and Training Management Information Statistical Standard
CRS	Commonwealth Rehabilitation Services
DCO	Disability Coordination Officer
DEAC	Disability Employment Action Centre
DEST	Department of Education, Science and Training
DEWR	Department of Employment and Workplace Relations
DLO	Disability Liaison Officer
EdNA	Education Network Australia
FaCS	Department of Family and Community Services
FLAG	Flexible Learning Advisory Group
Framework	Australian Flexible Learning Framework
HEEP	Higher Education Equity Programme
HREOC	Human Rights and Equal Opportunities Commission
ICT	Information and Communication Technology
ID	Instructional Design
ISD	Instructional Systems Design
InfoCat	Information Catalogue
JPP	Jobs Pathway Programme
LMS	Learning Management System
LOR	Learning Object Repository
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
NCVER	National Centre for Vocational Education Research
NCID	National Council on Intellectual Disability
NDEI	National Disability Employment Initiatives
NOIE	National Office for the Information Economy
NTIS	National Training Information Service
OoD	Office of Disability
PD	Professional Development
PDCA	Physical Disability Council of Australia
PSEDN	Post Secondary Education Disability Network
PSP	Personal Support Programme
RDLO	Regional Disability Liaison Officer
RTO	Registered Training Organisation
TLAG	Training Learning Advisory Group
TLF	The Learning Federation

UCD	Universal Content Design
VET	Vocational Education and Training
VocEd	Vocational Education
WC3	World Wide Web Consortium
WebAIM	Web Accessibility in Mind
WWDA	Women with Disabilities Australia

Executive summary

This environmental study is based on a reactionary and formulative approach, in which peak agencies, networks and advocates were sampled informally and then formally. It has integrated aspects of Australian Flexible Learning Framework (Framework) Projects, including LearnScope and New Practices in Flexible Learning, where a key success factor is the evaluation of existing networks and the establishment of new networks. This methodology is critical to sampling valid data from the coalface of current practice – at community, State and Territory and national levels – as well as establishing active relationships that continue beyond the life of the Project.

This connectedness is in itself a new tack which, while advocated, is not replicated in the outcomes of the environmental scan. The benefit of this approach is that the perceptions of the researcher were continuously qualified by experts and national frameworks. This focused the research on a needs analysis to see if current ideas within the main vocational education and training (VET) research infrastructure matched client need, as indicated by peak disability agencies and employment networks. The research findings were based on sampling a range of sources including, but not limited to:

- Vocational Education (VocEd)
- National Centre for Vocational Education Research (NCVER)
- Australian Flexible Learning Framework (Framework)
- Knowledge Tree
- Australian National Training Authority (ANTA)
- The Learning Federation (TLF)
- National Office for the Information Economy (NOIE)
- World Wide Web Consortium (WC3)
- Web Accessibility in Mind (WebAIM)
- Education Network Australia (EdNA)
- Department of Education, Science and Training (DEST)
- Information Catalogue (InfoCat)
- Department of Employment and Workplace Relations (DEWR)
- Department of Family and Community Services (FaCS)
- Google
- eLearn.

Summary of ideas

- User choice of accessible learning materials does not necessarily translate to good user choice. Accessibility needs to be defined in terms of both success in technical development, as well as instructional design development.
- Current accessibility and portability standards are not standards for instructional design.
- Most advances in the area of e-learning are secondary outcomes as benefits from one equity group translate across the spectrum of equity groups as a whole. Many of these advances have not been tapped into to generate outcomes for students with impairments. To date, the significant achievements in the VET research system have revolved around the progression of voice recognition software.
- There is a need to focus on how best to use the technology in the classroom rather than simply how to use the technology. There has been no investigation into the pedagogies and andragogies for integrating assistive technology (AT) options into instructional design within the Framework.
- There is also a need to focus on developing instructional design (ID) programmes that specialise on subsets within the equity groups. By constraining the user group, a stronger end product is created. This is recognised in such initiatives as the Indigenisation of Flexible Learning Toolboxes and the ultimate maximisation in the uptake of the product through customisation of the product to local language groups.
- Professional development (PD) networks (Framework, LearnScope) that support the uptake of flexible learning and advocate customisation of online products must also focus on training the trainer in the importance of accessibility. This is to address the marginalisation of equity user groups through the uninformed redevelopment of what was initially accessible material.
- Broader accessibility training will seed trainer capability to develop new content for targeted groups.
- National Disability Employment Initiatives (NDEI) need to collaborate with appropriate representative bodies from peak agencies from disability consumer organisations and from service providers. In the context of the research, these agencies included but were not limited to, collaboration with:
 - the Regional Disability Liaison Officer (RDLO) network
 - Disability Coordination Officer (DCO) network,
 - Commonwealth Rehabilitation Service (CRS) Australia
 - The Australian Federation of Disability Organisations.
- There are numerous employment programmes that are aimed at facilitating the transition between school, further education and employment for the disability equity group. The key organisations include:
 - ANTA
 - Australian Disability Training Advisory Council (ADTAC)
 - DEWR
 - DEST

- FaCS
- Centrelink
- Office of Disability (OoD)
- Australian Employers' Network on Disability.

The primary program outputs from this collaboration include Personal Support Program, Jobs Pathway Program, Job Network, Disability Employment Assistance and Disability Open Employment Services.

- Disability equity groups as a whole appear under-represented in VET e-learning initiatives. Significantly, the blind equity group has benefited the most at the expense of other equity areas due to development methodologies and processes that implicitly favour development for the blind.
- Primary issues for addressing engagement with this group through e-learning include the cost of computer equipment and assistive technology; compatibility of equipment; the match between learning preferences and online delivery; and the ways in which web pages may be designed.
- Problems have been found with the funding of AT and with the transition to employment, further education or training, when access to AT may be lost.
- Need for consolidation and transference of WC3 guidelines across all training package support materials. Current practice in both the ANTA development style guide and Government guidelines as a whole isolate WC3 and accessibility to online materials, excluding CD-ROM, DVD, and other formats from requiring the rigour of the Priority 1 quality assurance standards. This is a critical point for the future of e-learning with developments in digital broadcast and DVD self contained Learning Management Systems (LMSs).
- Expanding the network role of the Australian Quality Training Framework (AQTF) auditors to include accessibility as a check for the materials to be noted by the National Training Information Service (NTIS).

Project brief

The Framework is overseen by the Flexible Learning Advisory Group (FLAG) and funded by ANTA. FLAG provides strategic direction and support to the Framework. It is made up of a strategically-focused group of senior VET personnel advising the following organisations on national issues related to the directions and priorities for flexible learning in VET, with particular reference to e-learning:

- ANTA
- the ANTA Board
- DEST
- the Australian Information and Communications Technology in Education Committee (AICTEC).

Background

The 2005 Australian Flexible Learning Framework (2005 Framework) provides the vocational education and training (VET) system with e-learning skills, development opportunities, resources and support to meet today's increasingly technology-driven learning environment.

The 2005 Framework is a one-year, AUD \$15million national strategy collaboratively funded by the Australian Government and all States and Territories. It builds on the work of the 2000-2004 Framework but also strikes out in some exciting new directions, including meeting the e-learning needs of students and communities, business and industry, Indigenous learners and people with disabilities.

Objective of the 2005 E-learning for Target Learner Groups Project

In 2005, this Project will focus on e-learning for two target groups: learners with disabilities and young people in the 15–19 age group (including VET in Schools, disengaged youth and school-based apprenticeships). Collaboration will be sought with the Australian Disability Training Advisory Council (ADTAC) and relevant disabilities support groups; and for youth programs, the Düsseldorf Skills Forum and the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) initiatives for youth, and State/Territory based coordinating groups.

An initial exploratory phase will establish a number of studies. For disabilities training, these will include investigations of existing jurisdictional work, advances in assistive technologies, employment opportunities for people with various disabilities, and identification of priorities for resource development or re-purposing. Based on recommendations from these studies, the second phase will involve trials using new technologies for learners with disabilities, resource development or re-purposing, and a source of advice on assistive technologies and accessibility of

learning products. Relationships with peak support groups will be ongoing to promote sustainability of initial outcomes.

Project objective

The objective for the 2005 E-learning for Target Learner Group – learners with disabilities Project is:

to improve employment opportunities for people with disabilities through the use of appropriate e-learning resources and technologies.

Purpose of the 2004 E-learning for Target Learner Groups – learners with disabilities research project

The purpose of this research project is to provide the 2005 E-learning for Target Learner Groups – learners with disabilities Project team with an up-to-date environmental scan of recent relevant research, projects and other initiatives both within and external to the 2005 Framework that will inform the 2005 Project.

Scope of brief

The researcher/s will:

- carry out an environmental scan identifying recent and relevant research and/or projects/initiatives across the education sector, community and industry both nationally and internationally that:
 - focus on issues for learners with disabilities
 - identify strategies/recommendations that improve employment opportunities for people with disabilities through the use of appropriate e-learning resources and technologies
 - identify key networks in States and Territories.
- identify existing 2005 Framework resources that are relevant to the 2005 Project objective including outcomes from Flexible Learning Leaders, LearnScope , New Practices in Flexible Learning, Resources in Teaching, Learning and Assessment, and Policy and Research Projects.
- provide a brief description of each of the research/projects identified including any key findings/executive summaries and include contact details and links to relevant research/projects where possible.
- provide a case study of a peak organisation identifying how it currently uses assisted technology to link clients back into the workforce.

What are we talking about?

From the beginning of the Project it was essential to define e-learning, assistive technology, accessibility and universal design.

E-learning

As a component of flexible learning, **e-learning involves the application of** electronic media in the delivery of flexible VET programs. It can include the use of web, CD-ROM or computer-based learning resources in the classroom, workplace or home, as well as online access to course activities such as group discussions and online assessment activities.

Assistive Technology (AT)

AT is computerised equipment or software designed or modified to enable people with disabilities to access and use information and communication technology (ICT). The definition used by the World Wide Web Consortium (<http://www.w3.org>) is:

Software or hardware that has been specifically designed to assist people with disabilities in carrying out daily activities. It includes:

- wheelchairs
- reading machines
- devices for grasping etc
- screen readers
- screen magnifiers
- speech synthesisers
- voice input software
- keyboards
- point devices (Daniell, 2002).

The primary provider of AT as recommended through the Disability Coordination Officer (DCO) networks is Spectronics (<http://www.spectronicsinoz.com>). For a sample CD-ROM and report of Spectronics, please refer to Appendix 4: Will This Help CD-ROM: A Program of the Tasmanian RDLO Initiative. The peak organisation for educational assistive technology in Australia is the Australian Disability Clearinghouse on Education and Training (ADCET).

Design issues are addressed in Australia through the AusInfo Guidelines and internationally through the W3C Web Accessibility Initiative. Inclusive standards for web design and content, based on the W3C Accessibility Guidelines are a first step towards accessible online learning for people with disabilities. A plain English explanation of the guidelines can be read on:

<http://www.flexiblelearning.net.au/accessequity/guidelines/guidelines.htm>

How did we get here?

With ANTA and DEST's reaffirmed commitment to the national VET strategy of Shaping our Future 2004–2010, the Shaping our Future: Action Plan 2004–2005 was released in June 2004. As part of this, a refined Priority Action was formulated that specifically targeted the development and implementation of a strategic plan to respond to the emerging skills needed by the mature age workforce and our ageing population. The plan will:

- draw together knowledge emerging from State / Territory and national initiatives and policies and connect with cross-government approaches
- segment the characteristics and needs of the mature age population (including those seeking employment and those out of work or at risk of losing their jobs) and employers, including the establishment of base line data about current skill levels and access to training
- propose training and recognition responses to meet current and emerging needs
- form effective partnerships with employers and identify industry champions to increase employers' commitment to the provision of training and employment opportunities for people with a disability. The key partners in this effort included ANTA, DEST, State Training Authorities (STAs), peak industry bodies, Industry Skills Councils (ISCs), peak provider bodies, DEWR and FaCS. The action priority makes links with Strategies 1, 2, 3, 4, 5, 7, 9 and 10 of Shaping Our Future 2004–2010.

The 2005 Framework for VET Innovation – 2005 Framework Business Plan

Released in December 2004, the 2005 Framework Business Plan sets the E-learning for Target Learner Groups Project in the context of four strategic outcomes: Client Engagement, Resources and Innovation, Capability Building and VET System Support. These targets are focused through the combined action of 15 major works to the value of AUD\$15 million. These Projects include:

Client Engagement

- Industry Engagement
- Indigenous Engagement
- E-learning Creative Community Partnerships.

Resources and Innovation

- New Practices in Flexible Learning
- Quality E-learning Resources
- E-learning for Target Learner Groups
- Learning Object Repositories Network.

Capability Building

- LearnScope
- Networks of the Australian Flexible Learning Community
- VET E-learning International

- Knowledge Sharing Services.

VET Support System

- E-learning Benchmarking
- Research and Policy Advice
- Access to Bandwidth
- National Communication.

Why focus on these Projects?

In context of this environmental scan these Projects reflect peak VET research, networks and advocacy. To understand current and future trends in VET e-learning and network development it is critical to review the purpose and direction of these Projects if the long term implications for Learners with Disabilities is to be fully understood.

In summary these Projects are focussed on creating e-learning resources based on investment driven by domestic and international market demand.

On a more Project based level the key trends across the Australian education sectors has been:

- developing communities of practice and investigation into e-learning
- encourage the development of resources that address the coal face needs of learners and practitioners
- develop learning object models that are interoperable across user environments
- assessment of the extent of uptake of e-learning and the impact that this uptake has made on the target areas
- raising the awareness of availability and the opportunities presented by e-learning resources.

Generating demand for e-learning has been an ongoing focus of the 2000-2004 Framework and 2005 Framework as investment is made in realising the opportunities that new technology presents to both learners and practitioners. In the context of Learners with Disabilities the key then to establish the effectiveness of past, present and future initiatives must be to assess the establishment of what has been user need.

So what are the current 2005 Framework Projects?

E-learning Creative Community Partnerships

This Project aims to create sustainable demand for, and use of, e-learning in communities; to foster both learning in the communities, and through learning, economic and regional development for the communities themselves. It provides an exciting and innovative platform to enhance and grow community capacity building through effective skills development and to reach under-represented and disadvantaged client groups. It will build on the strong partnerships and extensive networks of Adult Learning Australia, as the peak body for adult learning in Australia, with national learning based peak bodies such as the Australian Learning

Communities Network, National Link of Neighbourhood Houses and Community Learning Centres and relevant State / Territory organisations.

A foundation of the Project will be the support provided for up to 16 existing community or regional development initiatives over a period of three years. The selected communities will each have a supported community flexible learning leader and will develop a specific consultation and implementation plan to meet local needs. The diversity of these communities and their outcomes will be a major strength of this Project. The Project will build on existing successful initiatives and the current and future projects, programs and services of the 2005 Framework, and will develop a 'virtual package' of e-learning resources, services and guides that can be applied to a range of community and regional development initiatives. A key focus will be on strengthening partnerships at a local, State / Territory and national level, to use the experiences of the selected community projects to inform and engage other community and regional development initiatives on a broader scale and to inform national, State / Territory and local program and funding models.

The New Practices in Flexible Learning Project

The aim of the New Practices in Flexible Learning Project is to fund innovative, practical and sustainable approaches to flexible learning in workplaces, communities and training organisations. In essence, it is about people and their capacity to turn knowledge into ideas and ideas into actions. New Practices in Flexible Learning strives to provide leverage for organisations to implement cultural, workplace and technological change through innovation and implementation. In 2005, New Practices in Flexible Learning will fund projects to produce systems, processes and practices that will be of lasting benefit to the national VET system and provide innovative teaching, learning and delivery models able to be replicated by VET organisations across Australia. It will continue with its focus on projects providing learner/client centred solutions while aiming to reset benchmarks for new practice in the 2005 Framework's activities.

The Quality E-learning Resources Project

The Quality E-learning Resources Project will extend its recent ground-breaking work in Interoperable Learning Objects to improve the flexibility of e-learning products for VET training package programs. A new series of customisable e-learning content will be developed and packaged according to international standards, for availability through an enhanced Toolbox repository of learning objects. This material will also be available in complete packages to support whole qualifications including support material for teachers. The Project will consolidate and further develop VET system understanding of learning objects, and how to customise and use them in teaching contexts. To broaden the developer expertise base, opportunities will be provided for previously uninvolved registered training organisations (RTOs) to become Toolbox developers, in supported arrangements.

Evaluation of the usage of recent products will enable continuous improvement, expanding the VET system's knowledge and practice in this area. Greater leverage from the work of the schools and higher education sectors will be sought, through exchange of research findings on learner preferences and instructional design. Where appropriate, consent will be sought for VET staff to access other sectors'

content. The Toolbox Champions service will continue with an expanded focus to support the customisation of learning objects and the uptake of learning object repositories.

The Learning Object Repositories Implementation Network Project

The purpose of the Learning Object Repository (LOR) Implementation Network Project is to build the capacity of the Australian VET system to share teaching and learning resources that support flexible delivery through the establishment and embedding of agreed principles in the design and development of resources and resource repositories. The Project will promote and progress interoperability within the VET system by monitoring international standards and facilitating adoption of these as appropriate. In 2005 the focus will be on refining technical specifications and extending the operation of a network of federated repositories in terms of more advanced services beyond those established in 2004, vis a vis, searching, viewing, downloading and transferring of reusable learning resources. The business model is a federation of trusted organisations that cooperates via agreed standards to enable the discovery and use of digital learning resources.

LearnScope

LearnScope is a major professional development Project which focuses on the enhancement of the professional skills that underpin e-learning and e-business. LearnScope guidelines and activities will be influenced by recent thinking about the acquisition of skills development of VET professionals in the 'knowledge era'. The Project will emphasise both individual and team responsibilities to model sustainable professional learning practices in their own learning through a range of strategies– particularly the integration of working, learning and knowing. LearnScope activities will support both individual and team based development and in particular:

- support VET practitioners and managers in the development of capacity to provide quality e-learning options to clients
- build on the successful 'Flexible Learning Leaders' model to provide learning opportunities to leaders, mentors, coaches, facilitators and innovators in e-learning and to assist them in providing ongoing support to individuals and teams taking up e-learning and e-business opportunities in their own organisations or other 2005 Framework initiatives; as part of their role, 'leaders' will both contribute to and be supported by the activities of the Networks of the Australian Flexible Learning Community Project
- establish processes which enable VET professionals and providers to assess their professional e-learning and e-business skills and skills development against nationally agreed benchmarks (currently under development and due for completion at the end of 2004).

States and Territories will be guided by a LearnScope framework which will provide opportunities for jurisdictions, organisations and individuals to develop new and innovative ways of achieving enhanced capacity for e-learning and e-business in VET. LearnScope will also facilitate the development of networks and partnerships through links to clients, inter/intra-State/Territory learning alliances

and integration with other 2005 Framework Projects, such as Networks of the Australian Flexible Learning Community and Knowledge Sharing Services.

The Networks of the Australian Flexible Learning Community Project

The Networks of the Australian Flexible Learning Community Project will advance the VET system in establishing sustainable professional learning practices within an environment of online networking, knowledge sharing and knowledge management. It will initiate and sustain a series of 'online' environments which will enable learning to take place by:

- consolidating and extending existing VET professional networks
- making new connections between VET staff, industry, researchers, professional groups, enterprises and communities
- facilitating the exchange and capture of explicit and tacit knowledge about e-learning and its applications within the VET system
- coordinating linkages and online activities with relevant national, State / Territory based initiatives.

The VET E-learning International Project

The Project will build an e-learning 'international gateway' and 'international interface' for e-learning in Australia and the 2005 Framework in particular. It will strategically position the Australian VET system in the global e-learning industry. The immediate goal is to provide international opportunities for Australian VET to shape and participate in learning innovation internationally and to demonstrate global e-learning market leadership. The downstream impact will be the positioning of Australian VET in the knowledge economy as a provider of e-learning know-how and innovative products (rather than the lowest cost training provider). In addition, this Project will facilitate a quality check by providing opportunities to internationally benchmark Australian VET in terms of its global relevance and capacity to impact locally on industry, community and individuals. In 2005, the VET E-Learning International initiative will focus particularly on providing a 'gateway' for international engagement with the flexiblelearning.net.au website and the Networks of the Australian Flexible Learning Community Project. It will comprise the following:

- work with the Knowledge Sharing Services team to review flexiblelearning.net.au content from the point of view of an international audience and develop a set of requirements for a specific 'international entry point' into the website
- work with the Networks of the Australian Flexible Learning Community team to support the engagement of international participants in appropriate networks
- technical development of the 'international entry point' to the flexiblelearning.net.au website

- stimulation and support for the engagement of all 2005 Framework Projects with international opportunities and perspectives
- development of a strategy to raise awareness within the international e-learning community of the proposed international entry point and the opportunities for engagement with Australian VET system expertise and experience in e-learning.

This strategy will build on the already significant international participation in the Australian flexible learning 'Community', the benefit of expertise and experience from the National Communication Project and the outcomes of other sub-projects. It will be the first step in the development of a longer term Internet strategy which increases global awareness of Australian VET generally, strategically positions Australian VET in the global e-learning industry and will culminate in a proposed international conference in 2007. The initiative will aim to achieve another layer of outcomes from the 2005 Framework Projects.

The Knowledge Sharing Services Project

The Knowledge Sharing Services Project will facilitate access to knowledge about e-learning in VET. This includes access to Framework-developed resources, Framework-facilitated discussions and presentations, and appropriate people and networks. The Knowledge Sharing Services Project will maintain the Knowledge Tree as an electronic journal opportunity for sharing knowledge. The Project will provide access to this knowledge through the flexiblelearning.net.au website, EdNA VET Online website, email enquiries and alert services.

The Project recognises that VET professionals are not limited by artificial boundaries such as 'e-learning' or specific national projects such as the '2005 Framework'. Hence, this Project will be interoperable with broader educational initiatives such as EdNA and training.com, and with State/Territory and local knowledge bases. The Project will utilise a range of push-and-pull technologies to achieve its objectives including databases, search and browse tools, RSS feeds, blogging and wikis.

The Project will model best practice in online knowledge management systems, taxonomy, ontology and interoperability. This Project will implement e-knowledge standards for capturing and transferring knowledge across different contexts, including metadata and standards associated with the semantic web. The Knowledge Sharing Services Project, as a cross 2005 Framework Project, will provide a common technology infrastructure to support all 2005 Framework activities.

The Project will provide a range of website development services and web-based tools for use by 2005 Framework Projects to support the 2005 Framework's activities. The Project will work closely with the Networks of the Australian Flexible Learning Community Project to ensure that tacit knowledge made explicit through online collaborative activities is made available to others. The Project will work closely with the National Communication Project and the Client Engagement Program to ensure that the knowledge gained is shared with all the relevant target markets.

The E-learning Benchmarking Project

The E-learning Benchmarking Project will identify, collect, analyse and report on a suite of quantitative and qualitative indicators on the uptake, use and impact of e-learning in VET. When taken together, these indicators will provide a set of indicators relevant at national, State/Territory and provider level. The performance indicators, used to collect the data, may also be adapted and used by individual providers to establish organisational goals and benchmarks for e-learning.

The process will assist VET providers in establishing and maintaining good data systems. The primary data source for assessing uptake, use and impact will be a baseline survey of e-learning in VET which will be administered early in 2005. The survey data will be supplemented by existing data drawn from VET data sources including the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS) and more widely including the Australian Bureau of Statistics (ABS).

Some of the data gathered through the benchmarking process will also contribute to the overall evaluation of the efficiency and effectiveness of the 2005 Framework.

The Research and Policy Advice Project

The Research and Policy Advice Project will provide a high quality and flexible research program, which contributes to the achievement of the vision, goals and implementation of the National VET Strategy and of the 2005 Framework. It will support carefully targeted and rigorous research which will provide timely and evidence-based research to inform FLAG/2005 Framework activities. Research and Policy Advice will commission research projects that inform FLAG on significant policy issues. Existing partnerships with other national research agencies will be strengthened and new ones formed in order to address the long-term sustainability of research relevant to flexible learning in VET.

The National Communication Project

The Project's primary focus is to generate awareness of the enormous potential and benefits of e-learning and to stimulate widespread uptake, sustainability and embedding of e-learning for VET system clients including industry, indigenous people and community.

For more information on 2005 Framework Projects visit:

<http://www.flexiblelearning.net.au/aboutus/resources/affframeworkbusinessplan2005.pdf>

Who are we talking about?

The key client perspective for this study as well as a number of the coincident projects is that of the disability equity group. In the ANTA *Working With Diversity* (2004) series, it is indicated that around 17% of Australians aged between 15 and 64 have some kind of disability. Learners with a disability are like all learners; they are diverse with a wide range of skills, knowledge and needs.

A disability may be defined as any physical, sensory, neurological, intellectual, cognitive or psychiatric condition that can impair a person's ability to perform an activity in the manner considered to be within the normal range. Most people are affected by a disability at some stage in their lives. For some, the disability will be genetically determined and can start before birth. For others their disability will arise from environmental causes, such as an accident, an illness or ageing. There are also people for whom the cause of their disability is unknown.

Disabilities may be short or long term and some are episodic. They may affect a person's capacity to communicate, interact with others and learn or function independently. Disabilities may be temporary or permanent.

There is a very broad range of disabilities and there are varying degrees of severity within different disabilities.

Some of the types of disabilities that learners may have include:

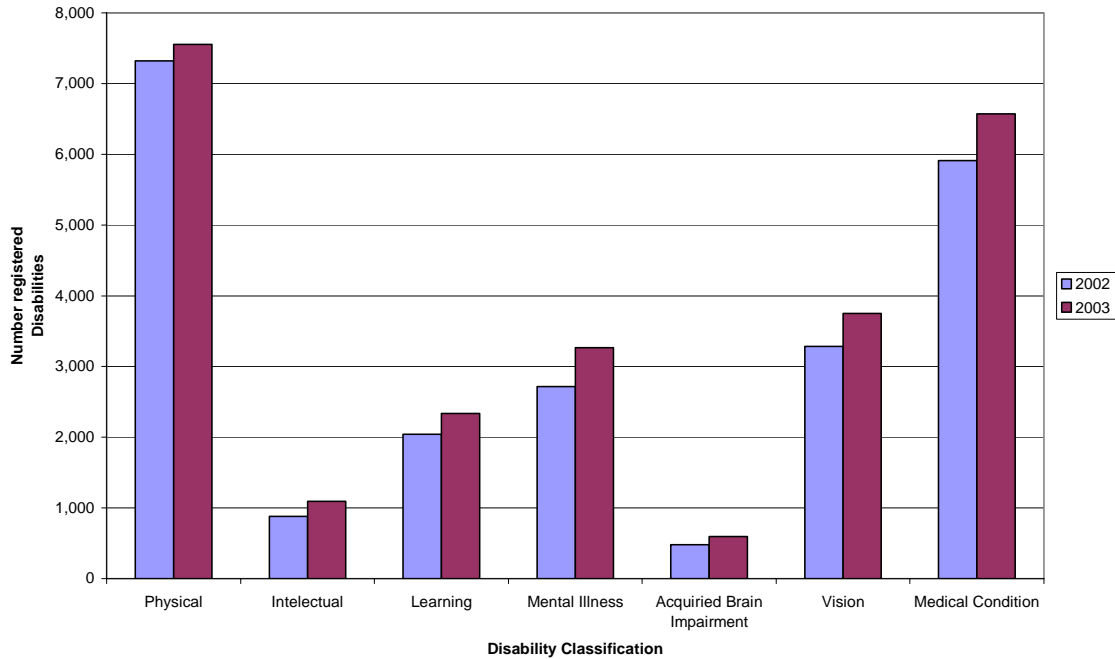
- sensory impairment, involving vision, hearing or speech
- physical or mobility impairment
- psychological or psychiatric impairment (or mental illness)
- disabilities that may result in multiple impairments, such as cerebral palsy or a head injury cognitive or intellectual disability
- learning disabilities including Attention Deficit Hyperactivity Disorder (ADHD)
- medical conditions and other disabilities.

(<http://www.westone.wa.gov.au/workingwithdiversity/>)

The term 'disabilities' is often referenced but not in a quantified descriptive breakdown. Similarly this demographic group is not referenced in terms of e-learning. This breakdown can be assessed by referring to Figure 1.0 of the comparison of student numbers for 2002 and 2003, who enrolled in a Remote Access Study Mode, with a VET provider, and indicated that they had a disability.

Figure 1.0 Comparison of student numbers for 2002 and 2003 who enrolled in a Remote Access Study Mode with a VET provider and indicated that they had a disability (compiled for data sourced from NCVET 22/12/2004)

Remote Access is defined by NCVET as accessing delivery material through flexible learning based materials including online.



How far have we come?

Contrasting reports on Assistive Technology in 1999 and 2002

Conclusions 1999- Meeting the technology needs of students with disabilities in post-secondary education

Problems have been found with the funding of AT and with the transition to employment or to further education and training, when access to AT may be lost. At present, access by students to AT depends mainly on knowledge acquired haphazardly by Disability Liaison Officers (DLOs). The role of academic staff with knowledge of students' requirements is also important.

The literature review and the survey were in agreement about which issues were most important for students. There are vast inconsistencies between and within educational institutions. However, constant technological change and the many contextual variables make it impractical to endorse a single model for service delivery.

Recommendations 1999 - Meeting the technology needs of students with disabilities in post-secondary education

- that students with disabilities be assessed in relation to their AT needs by appropriate educational authorities before enrolment in post-secondary institutions
- that people involved in the assessment of the AT needs of students with disabilities have access to continuous, appropriate training and be designated as assessors
- that training in assessment of the AT needs of students with disabilities be developed at a national level by appropriate educational authorities
- that DLOs be trained in the use of AT by their post-secondary institutions
- that academic and support staff be trained in the use of AT in the context of their course objectives by their institutions
- that staff in information technology service units in post-secondary institutions undertake awareness training about the needs of students with disabilities
- that professional development units be established in post-secondary institutions to provide ongoing training to staff
- that in relation to AT, the process of identifying the needs of students with disabilities, the provision of training and support and the provision of technology be met through the institutions' own service delivery systems and resources
- that the only exception to this principle is in the case of students with severe disabilities, whose needs may be partly met through service delivery outside the post-secondary setting.

(http://www.dest.gov.au/archive/highered/eippubs/eip99-6/eip99_6.pdf)

Conclusions 2002 - Report on Assistive Technologies (AT) for Online Training Delivery Australian Flexible Learning Framework

The research conducted for this paper on AT, which enables people with disabilities to access online VET, has identified a number of issues. Admission to ICT and online learning require access to computers and literacy. It further requires fluency in ICT and skills in reading online information and in the operation of AT. For many people with disabilities, there are issues of cost and the interoperability of AT. For those in the deaf community, the technology is an aid rather than a substitute for face-to-face teacher facilitated learning.

For people with a physical disability, depending on the nature of the disability, one piece of equipment may work well and be suitable for one student but not for another. For the web to be useful, a new way of understanding information is required. Users need to know about web addresses, modes of access and the organisation and construction of websites.

In summary the issues for learners with disabilities are the:

- cost of computer equipment and AT
- compatibility of equipment
- match between learning preferences and online delivery
- way in which web pages may be designed.

The research has identified strategies which, if implemented, would enhance online learning for people with disabilities. The first strategy involves the inclusive or universal design of web pages, computer hardware and software. The design issues are being addressed in Australia through the AusInfo Guidelines and internationally through the W3C Web Accessibility Initiative. In turn, web design and interoperability issues also need to be considered by ANTA. W3C has developed web content Accessibility Guidelines.

ANTA has endorsed the findings of the report *Preferred Standards to Support National Cooperation in Applying Technology to VET*. However, these standards are preferred and not mandatory. This paper argues for an awareness of the importance of inclusive standards for web design and content based on the W3C Accessibility Guidelines by ANTA and is a first step towards accessible online learning for people with disabilities. In addition, the Accessibility Guidelines are for use by software developers but can also be used by content developers in the VET system. Accordingly, professional development for online developers should include WC3 Guidelines for Accessibility.

The second strategy involves RTOs making reasonable adjustments to ensure that online services may be accessed by people with disabilities. This would involve consideration of the design and construction of RTO web pages, online information, enrolment, teaching and learning strategies, access to technologically based information and the identification of appropriate assistive technology. The research suggests that there are issues in relation to the development and provision of assistive technology for online learning for people with disabilities that can be addressed at a system level. Accordingly, the following recommendations are proposed.

Recommendations 2002- Report on Assistive Technologies for Online Training Delivery Australian Flexible Learning Framework

- FLAG undertake a review of the preferred standards in light of the identified needs of people with disabilities to incorporate W3C guidelines for inclusive/universal web design and content
- FLAG and ANTA develop an awareness strategy that targets computer hardware and software companies to encourage inclusive design
- FLAG develop a set of online benchmarks and a range of product exemplars to demonstrate ways of meeting the needs of users with disabilities
- FLAG implement a strategy to distribute the Guidelines for Online Product Development produced for the Access and Equity in Online Learning Project

- FLAG Professional Development initiatives such as LearnScope and Toolboxes include consideration of the online learning needs of people with disabilities when developing online products and W3C Guidelines for Accessibility.
(www.flexiblelearning.net.au/accessequity/downloads/R012RS.pdf)

Observations and reflections from findings – Part 1

The strategic partnerships and directions initiated by ANTA have clearly impacted on the VET system as a whole with regard to the standards and methodologies for developing online resources. The effect of the disability equality legislation has had a significant impact as the WC3 accessibility guidelines are ratified throughout all Australian government agencies.

However, development methodologies are beginning to show divergence in managing these technical standards. This can be seen by referring to the Victorian Department of Education and Training, Office of Training and Tertiary Education, Program Development Branch Draft Working Document – *Learning outcomes from Accessibility Testing of Toolbox Series 5 Prototypes* (2002).

Accessibility means different things to different people:

- for someone in a remote area with poor Internet connection, it is the ability to access learning materials, often with the images turned off in their browser
- for people in education and training organisations, it is the ability to access learning materials on an ageing computer, with an even older browser because there is simply no budget for the latest equipment
- for most people it means accommodating their less-than-perfect functional abilities.

Put simply, a ‘functional ability’ is a person’s ability to do something. Your functional ability may be impaired due to a variety of factors – physical, environmental, cognitive or technical. For example, your ability to play a video game might be impaired because:

- you have problems with hand-to-eye coordination and frequently miss shots
- you are viewing the game in a brightly lit room that makes it hard for you to see a fast-moving object
- you have never played the video game before and you can’t quite remember the finer points of the rules so learning is a little stressful and distracts you from the game
- your joystick or keyboard controls are clunky and are not well-suited to the game you are playing.

It is best to think about accessibility in terms of functional abilities and not as ‘designing for disabilities’.

Design ‘for disabilities’ is bad design

Many people mistakenly think of accessibility as ‘designing for people with disabilities’. That is a limiting definition – especially if you are developing Toolboxes. Designing an interface with a disability in mind can cause you to make assumptions that lead to real problems at implementation. For example, if you were developing a Toolbox that included content about the road rules, you might think, ‘Well, blind people don’t work in the trades, eg use drills and equipment, so I don’t have to worry about accessibility.’

This assumption could lead to the following problems:

- Toolboxes are designed to be ‘shared’ by different learning systems and organisations. This means that someone who is studying one discipline might need to access content on a particular subject from another. There is no guarantee that they can see.
- Everyone has a limitation on their abilities. Someone who can see might still have limitations on their vision. By failing to allow for this, you will ‘lock out’ people with no vision and you could make learning difficult or impossible for others because you didn’t think about people with poor vision.

What are the symptoms?

You can tell if you are making these types of bad design assumptions if:

- you think accessibility means that you can’t use video, scripts, *Flash*, nice visual imagery or anything else that might be interactive, exciting or fun – in other words, ‘accessible’ is another word for ‘dull’
- you think that accessibility relates only to the visual aspects of the Toolbox
- you think only about ‘how blind people would use this’ when you develop a Toolbox
- testing for accessibility comprises checking your designs with a screen reader.

You may notice that all of these examples relate entirely to designing ‘for blind people’. Even if you have invested in developing your understanding of accessibility and your design and development techniques, you may tend to think about it in terms of vision – mainly blindness. This is common. Much of the published material that deals with accessibility does so from a ‘visual’ point of view.

Perhaps this is because visually impaired people are a more vocal group than others or because the most famous legal accessibility case involved a blind man. Whatever the reasons are, it is important to have some grasp of how different functional limitations affect Toolbox users. If you fail to do so, you could be locking out many users without even knowing it.

People with mobility impairments

People may struggle to use a mouse because it can be difficult to control for any number of reasons, including lack of experience, tremors or arthritis. These people may rely more on the keyboard than the mouse eg, to navigate through lists of links and forms. They might also use devices like special mice, trackballs, on-screen keyboards and head wands. Imagine navigating a page with a drag and drop exercise by only being able to press one key at a time. There is a tendency to think that keyboard shortcuts are the solution for this group but that is not always useful because pressing multiple keys is a task demanding a degree of dexterity in itself. Reducing the number of extraneous links on a page and avoiding the use of miniscule buttons makes life easier for these users.

People with hearing impairments and reading difficulties

There are people who are hard of hearing or deaf. There are no real adaptive technologies that these people can use and in some ways, their direct needs are more or less the same as anyone else's, although video captions, subtitles and transcripts are either essential or helpful, depending on the content. Literacy levels vary greatly for people with hearing impairments. A detailed discussion of these characteristics is beyond the scope of this paper but its implications are mentioned briefly.

People with low literacy levels tend to get very discouraged by large blocks of text and will look for the following prompts:

- icons and buttons, images etc, to help gain an idea of context
- key words that they might know; they tend to scan for these, identify them and use them to draw meaning about a page as a whole; sometimes it's a good idea to make key words very obvious through visual means such as colour and style effects.

Lots of instructional text at the start of a page or an exercise can be discouraging and can make seemingly well-integrated activities difficult or impossible to understand.

Including sign language in videos is not the straightforward solution you might expect. If the video resolution or window size is small, it can be difficult to see the hands clearly – similar in effect to reading text on a fuzzy monitor.

People with vision impairments

How people with a visual impairment interact with a computer depends on the extent of the impairment. If they are Windows users with poor vision, it might involve setting the standard settings to utilise enlarged fonts and icons. (Look under the Start menu > Programs > Accessories > Accessibility.). They may increase the text size by using their browsers. They might use their own stylesheets to over-ride the stylesheet used by the developer of a website if the

colour combinations make reading difficult. If they are completely blind, they would use a screen reader – a software application that reads aloud the contents of the screen. Screen readers are used for all kinds of computing tasks – not just the web. They are entirely keyboard-driven, ie the user can't see the mouse, so 'point and click' is out of the question.

Screen readers look at the underlying structure of web pages and provide the user with important orientation information. They get this information by reading not only the content of the page but also the HTML that defines the page structure (or *Flash*, video, etc). It is important that you use valid structural HTML and stylesheets with relative size properties.

Some multimedia technologies include accessibility features but these must be seen during development to ensure that they will output accessible content. It is important to make sure that you are familiar with these features and that you know how to use them correctly. You may also need to direct users to the latest versions of the media players to ensure compatibility.

Summary of common issues

The most common accessibility problems occurred with relation to:

- Flash, multimedia content and interactive features
- scripts (typically Javascript)
- opening new windows as pop-ups
- HTML forms
- HTML tables
- frame titles.

The article the report provides excellent case examples of these issues that appeared in the Series 5 Toolboxes as well as remedies within the context.
http://www.flexiblelearning.net.au/toolbox/toolbox6/workshop/03/Series_5_Draft_Accessibility.doc

Observations and reflections from findings – Part 2

The report, while produced with a clearly technical bias, is advocating the inclusion of universal design and a progression away from 'Designing for Disabilities'. This idea has gained significant weight with pushes within the scope of the 2005 Framework to move towards a technical benchmark rather than trying to merge targeted pedagogical design with client need. At the same time, the ANTA publication 'Guidelines to Universal Design of e-Learning for Managers and Practitioners (R014G) Access and Equity in Online Learning' was released. The publication followed similar ideas but also argued that no single approach is appropriate for all Indigenous learners.

The paper quite clearly states the importance of accessibility standards but also offers unique instructional design, and collaboration with communities and peak

agencies. It also summarises the importance of consultation with the equity group representatives in:

- planning the resource
- planning graphical, audio and content development
- developing instructional design
- developing a user interface and
- being a meaningful and ongoing component of the development process.

These ideas clearly recognise the individual characteristics and scope of diversity within this equity group, concepts which should be strategically applied across all equity groups if long-term success is to be achieved. As a snapshot of more recent developments, this idea has been progressed significantly by Lamshed et al (2003) in *Keys to Access: Accessibility Conformance in VET*.

The authors state that:

In Australia, the *Disability Discrimination Act 1992* makes it unlawful to discriminate against people with disabilities. However, the Act is not specific about online accessibility. It does not, for instance, include reference to the WAI Guidelines as does Section 508 of the *US Rehabilitation Act*. Under the *Disability Discrimination Act 1992*, a complainant needs to inform the Human Rights and Equal Opportunities Commission (HREOC) of the issue. The HREOC would then investigate the complaint and may request that action be taken to rectify the situation before any legal action is taken against the organisation for non-conformance. All Australian State and Territory governments are actively promoting accessibility conformance for websites managed by their departments and *Keys to Access: Accessibility Conformance in VET*. All have policies and guidelines in place and some, such as the Australian Capital Territory, have very strict guidelines which recommend or mandate all of the essential WAI Guidelines.

There are numerous resources online about accessibility conformance created in Australia and overseas available to assist practitioners in achieving accessibility. However, according to tests conducted in this research, many TAFE and independent provider web sites are generally not conforming with the WAI Guidelines; some even at the most basic levels. Failure can be as simple as not providing alternative text tags for images which are necessary for the site to be navigated using assistive technologies. We found that the majority of web sites have significant obstacles that would make it difficult for disabled people to use. This research revealed a number of reasons for this failure to conform, including:

- the lack of specific accessibility policy guidelines and implementation strategies at the provider level
- insufficient identification and allocation of responsibility to staff to ensure accessibility conformance
- lack of professional development and training
- practitioners being unaware of the WAI Guidelines
- practitioners being unsure how to implement the WAI Checkpoints
- web sites using content and learning management systems that may not permit the creation of accessible pages
- web sites having many old (legacy) pages that were not made accessible
- the transitory and somewhat confusing nature of the WAI Guidelines
- The use of invalid testing methodologies (tools and techniques).

There is no technical reason why VET provider web sites should not meet the highest levels of accessibility. The accessibility standards need to be considered in the same way as building regulations. In this analogy, the W3C WAI Guidelines form the foundations of good design and programming on which attractive and informative web sites can be created. Unfortunately, it appears that accessibility implementation may often be considered on the basis of a risk analysis (is it likely a person will complain?), whereas it should be seen as providing an opportunity to open up training to people with disability or disadvantage. Some learning materials also fail to meet accessibility requirements, although at the commissioning level, there has been a determined effort to make them accessible.

Accessibility conformance for learning materials is sometimes more complicated to achieve. Many learning materials require a high degree of interactivity, and depending on how these are developed, may conflict with the some WAI Checkpoints. There have been different approaches taken across VET to accommodate this conflict, from those who believe that conformance is mandatory to those who are inclined to tailor learning materials individually for students with disability, thereby skirting the accessibility requirements.

It recommends that learning materials should satisfy the highest levels of accessibility, and developers justify which specific WAI Checkpoints they are unable to achieve if these should hinder the pedagogical approach required by the learning outcomes. In both web site and learning materials development, accessibility conformance is related directly to practitioner awareness and training. The overwhelming demand by practitioners (revealed in this research) was for more professional development. This report recommends a general accessibility awareness course and a specialised practitioner course that focuses on technical aspects in meeting the accessibility requirements.

The process of accessibility implementation needs to be actively managed by the institution, particularly in the larger TAFE colleges. Implementation has cost implications, particularly where there are legacy pages and non-conforming content management systems. This implementation will require:

- policy development and online accessibility guidelines built around access and equity policy
- independent audits of the current web sites and content management systems (and accommodating the consequent costs of rebuilding)
- a cross-institution unit that monitors and supports accessibility implementation
- an awareness campaign for teaching staff and practitioners
- professional development to ensure that they know how to develop
- online resources that meet the accessibility requirements.

By attending to principles of universal access, VET will increase the opportunity of those with disability and social disadvantage to participate in their training programs, and thereby, improve potential employment prospects for these people.

Final reflection

The difference between universal design and universal access has to be examined in the development of e-learning resources. This separation has implicit indicators that while universal design implies a freedom to access material, it has also the broad undertones of a universal instructional design model. This is clearly not the case and does not incorporate the broad demographical diversity within the disability equity group, other equity groups or learners as a whole in the new global education market. Universal access addresses the moving towards a distinct blurring of the definition of e-learning and online learning indicating a need for the development for the connections to targeted instructional design. This is echoed by Eklund et al (2003): FLAG Policy Advisory Paper, *E-learning: Emerging Issues and Key Trends: A discussion paper*.

Instructional design as an emerging discipline

Instructional Design using technology or Instructional Systems Design (ISD) is a newly rediscovered discipline. Currently in the software development industry, there is a lack of understanding of the role of the instructional designer as a participant in a multi-disciplinary development team, or even where instructional designers may be found or trained. It combines knowledge of educational theory and practice with appropriate technologies to enable learning, and encompasses the whole of the development and evaluation lifecycle. One of the foundations of instructional design is that it is a component of a user centred development process. It is based on knowledge of the application of learning theory to designing experiences that promote learning and leverages from a significant literature associated with designing good learning – an activity taught in teacher training courses for hundreds of years. It involves choosing appropriate technologies and designing interactions that promote effective and efficient knowledge transfer.

A tenet of universal content design (UCD) and a practice of instructional design as a discipline is to view the development of the product (website, e-learning environment, cognitive tool) as only part of the process. Just as software requires documentation, a deployment strategy, including training, and a help-desk facility for ongoing support, so too do the outputs of the educational technology development process require facilitation and deployment. The role of the teacher, to interpret the educational artifacts and customise their delivery into the teaching and learning environment, must be supported.

As constructivism is eventually recognised as a philosophy about curriculum design rather than a learning theory, VET and schools will gradually reform their curriculum and learning structures. For the VET system to effect e-learning changes, 'policy must be advanced which supports likely future scenarios, including pervasive, virtual delivery of learning materials' (Hill et al, 2003). The VET system will continue to be a leader in providing a balance of professional development for teachers in the use of ICT, and in developing quality new content for online delivery.

During the course of the interviews conducted in researching this paper, which included highly knowledgeable persons from the policy, content development, and training areas of VET, some broad but clear messages emerged that converged with the authors' views on the 2005 Framework and its future. Together with a consistent level of support found in the literature and the issues developed in this paper, some conclusions and recommendations can be made. The 2005 Framework's 36 e-learning emerging issues and key trends may be summarised as:

- The 2000-2004 Framework has made significant achievements in promoting the use of ICT in education in VET; it is a world-class initiative and represents the clearest and most coordinated approach of any sector.
- It is continually being refined, has a clear direction and its multiple emphases are 'about right'.
- It should continue its work, and move to impact the next level of teaching practitioners underneath the early adopters, as well as middle management.
- It should encourage and allow for projects that use simple and well-understood technologies as well as those emerging.
- There is a greater recognition of e-learning as a business, and as part of a business, and as such the 2005 Framework needs to promote initiatives that engage businesses and promote return of investment (ROI) for e-learning so that business can recognise its benefit.
- Future Projects under the 2005 Framework will be less focused on the development of product, but more on developing processes and strategies that engage people, create an acceptance and understanding of e-learning and learner centred approaches, and empower practitioners.
- Product development needs to continue to recognise the importance of the multiple contexts into which e-learning are delivered. This can be achieved by the development of highly customised materials and the creation of tools that allow teachers to select and alter content or generate new content of their own.
- The VET system should engage in a continuous benchmarking and networking of activities into other educational technology communities, especially the corporate sector.

Consolidation of the both the 2000-2004 Framework and 2005 Framework's achievements across policy and individual practitioner development will mean that its impact can be broadened and sustained into the future.

Future readings

Available soon from the NCVET website is the *Statistical Compendium on People with a Disability*. This report provides details on more than 91,000 VET students who indicated that they had a disability in 2003.

Carry out an environmental scan

Identifying recent and relevant research and/or projects/initiatives across the education sector, community and industry both nationally and internationally.

Identify key networks in States and Territories: The Australian Federation of Disability Organisations.

In early January 2001, the former Minister for Family and Community Services, the Hon Jocelyn Newman, announced a new funding model for national disability peak organisations funded through the Department of Family and Community Services (FaCS).

The model included the establishment of a Federation to become an advisory voice for people with disabilities across Australia. This is to be known as the 'Australian Federation of Disability Organisations' (AFDO) or the 'Federation'. The government also assigned responsibility for the establishment of this body to the peak disability organisations that it funds; who would also become the Federation's founding members. After more than two years and many delays, the company was registered in October 2003 and the first board put in place.

The mission of the Federation is to champion the rights of people with disability in Australia, and help them participate fully in Australian life. The purposes are to:

- represent people with disability in Australia
- help people with disability take part in all aspects of social, economic, political and cultural life
- lobby governments and other institutions on disability issues
- advise government, disability organisations and other organisations about their disability policies
- research disability issues
- support disability organisations and people with disability
- inform and educate the general community about disability.

This will be achieved through the Federation consulting, coordinating and promoting policies, issues and views that are held by Directors, their member organisations and the broader disability sector.

Contact details:
Federation Director: Ms Mary Ann Diamond
Ross House, 247 Flinders Lane
Melbourne VIC 3000

Tel: (03) 9662 3324
Fax/TTY: (03) 9662 3325
Email: afdo@afdo.org.au

This will continue to expand as the representation through the Federation is expanded. Currently the Federation is comprised of the following peak bodies;

- Blind Citizens Australia
- Deafness Forum Limited
- National Ethnic Disability Alliance
- Women with Disabilities Australia
- National Council on Intellectual Disability
- Physical Disability Council of Australia
- Head Injury Council of Australia
- Australian Association of the Deaf Representatives.

Blind Citizens Australia (BCA)

The united voice of blind and vision-impaired Australians. Our mission is to achieve equity and equality by our empowerment, by promoting positive community attitudes, and by striving for high quality and accessible services which meet our needs.

BCA is committed to equal access to the Internet for people with low vision and for people using Braille or speech devices. The BCA website sets an example simply by following web accessibility standards and guidelines.

Contact details:

87 High Street
Prahran VIC 3181

Tel: (03) 9521 3433
1800 033 660.
TTY: (03) 9521 120
Fax: (03) 9521 3732
Email: bca@bca.org.au

Deafness Forum Limited

Improving the quality of life for Australians who are deaf, have a hearing impairment or have a chronic disorder of the ear.

Deafness Forum Limited is the peak body for deafness and seeks solutions and lobbies on issues for all Australians who are Deaf, have a hearing impairment or chronic disorder of the ear.

Contact details:

218 Northbourne Avenue
Braddon ACT 2612

Tel: (02) 6262 7808.
TTY: (02) 6262 7809.
Fax: (02) 6262 7810.
Email: deaforum@ozemail.com.au

National Ethnic Disability Alliance (NEDA)

Promoting the rights of people from non-English speaking backgrounds with disabilities throughout Australia.

NEDA is a national disability consumer organisation which maintains a primary focus on issues affecting people from a non-English speaking background (NESB) with disabilities.

This incorporates a dual emphasis on:

- disability within the context of NESB communities
- the impact of a NESB background on the person with a disability, including their access to appropriate services and supports.

Contact details:

PO Box 381

Harris Park NSW 2150

Tel: (02) 9687 8933

Fax: (02) 9635 5355

Email: neda@ozemail.com.au

Women with Disabilities Australia (WWDA)

WWDA is the peak organisation for women with disabilities in Australia. It is a federating body of individuals and networks in each State and Territory of Australia and is made up of women with disabilities and associated organisations.

WWDA is a woman centred organisation which works on a collective model. This means that decisions are made using a consensus approach. The national secretariat is located in Canberra, the capital city of Australia.

WWDA is run by women with disabilities, for women with disabilities. It is the only organisation of its kind in Australia and one of only a very small number internationally. WWDA is inclusive and does not discriminate against any disability.

Contact details:

PO Box 605

Rosny Park TAS 7018

Tel: (03) 6244 8288.

Fax: (03) 6244 8255.

Email: wwda@ozemail.com.au

Web: www.wwda.org.au

National Council on Intellectual Disability (NCID)

To work to make the Australian community one in which people with intellectual disability are involved and accepted as equal participating members.

The NCID was established over 30 years ago by parents and friends in an endeavour to improve the quality of life of people with intellectual disability and to fill the need for national unity and information.

NCID is based in Canberra, Australia, and is the recognised national peak body with the single focus on intellectual disability.

Contact details:

Tel: (02) 6296 4400
Fax: (02) 6296 4488
Email: ncid@dice.org.au

Physical Disability Council of Australia (PDCA)

PDCA believes that all people with physical disabilities should be able to participate in society as Australian citizens to the same extent as the rest of the community. This requires POWER and an accessible SOCIAL INFRASTRUCTURE.

The role of PDCA is to inform all levels of government, the business sector and the Australian community of the needs of people with a physical disability and to lobby for change as necessary.

Their aim is to ensure that by 2010, the needs of people with a physical disability will be met in all Commonwealth Government legislation, policies, services and programs and in all areas of the private sector and the community of Australia, enabling full participation.

Contact details:

PO Box 77
Northgate QLD 4013

Tel: (07) 3267 1057
Fax: (07) 3267 1733
Email: pdca@ozemail.com.au
List: PhysicaldisabilityAustralia@yahoogroups.com

Head Injury Council of Australia

The Head Injury Council of Australia aims to enable each person who has a brain injury and their families to:

- reach their full potential
- achieve optimum quality of life
- have access to support appropriate to their needs.

The Head Injury Council of Australia advocates at the national level for people with Acquired Brain Injury and their families and carers on behalf of affiliated agencies in all States and Territories.

Contact details:
PO Box 82
MAWSON ACT 2607

Tel: (02) 6290 2253
Fax: (02) 6290 2252
Email: hicoa@ozemail.com.au

Australian Association of the Deaf (AAD)

Representing on a national level, Deaf people who use Australian Sign Language.

The AAD is a national, voluntary consumer organisation that represents the views of Deaf people who use Australian Sign Language (Auslan). The AAD was founded in 1986, during the National Deafness Conference in Adelaide, South Australia. The AAD has made, and continues to make significant contributions towards improving the quality of life of Deaf people in Australia. The AAD enables Deaf people to seek their entitlements and assert their rights as contributing citizens of the community.

Contact details:
PO Box 1083
Stafford QLD 4053

Voice: (07) 3357 8266
TTY: (07) 3357 8277
Fax: (07) 3357 8377
Email: aad@aad.org.au
website: www.aad.org.au

Representatives

The interim management committee of the Federation comprises the following representatives:

1. *Blind Citizens Australia*: Maryanne Diamond – (03) 9521 3433
2. *Deafness Forum Ltd*: Brian Rope – (02) 6262 7808
3. *National Ethnic Disability Alliance*: Lou-Anne Lind – (02) 9687 8933
4. *Women with Disabilities Australia*: Carolyn Frohmader – (03) 6244 8288
5. *Nat. Council on Intellectual Disability*: Mark Pattison – (02) 4473 7084
6. *Physical Disability Council of Australia*: Sue Egan – (07) 3267 1057
7. *Head Injury Council of Australia*: Fay Rice – (02) 6290 2410
8. *Aust. Association of the Deaf*: Robert Adam – (02) 9286 3944.
(<http://www.disfed.org.au>)

National strategies – The Commonwealth Disability Strategy

A strategic framework for inclusion and participation by people with disabilities in Government policies, programs and services.

The Commonwealth Disability Strategy recognises that the Australian Government has an impact on the lives of people with disabilities through its many programs, services and facilities. The Strategy is about enabling full participation of people with disabilities.

Under the Strategy, Australian Government organisations are obligated to remove barriers which prevent people with disabilities from having access to these policies, programs and services.

This means ensuring that people with disabilities have the same access to buildings, services, information, employment, education, sport and recreational activities as everyone else in the community.

In 1999, the Commonwealth Disability Strategy was reviewed, and as a result, it has been refined to ensure it continues to meet the needs of people with disabilities.

It is now more flexible and encourages organisations to:

- provide information in accessible formats
- employ people with disabilities
- purchase accessible services
- recognise people with disabilities as consumers of services
- consult with people with disabilities to find out what they need.

The Strategy complements a number of other current initiatives, including those of the Office of Government Online, the National Office of Information Economy and the Human Rights and Equal Opportunity Commission to make information, particularly electronic information, accessible to people with disabilities.

The Commonwealth Disability Strategy's most important message can be summed up in one sentence: A little thought goes a long way in ensuring that people with disabilities can live, work and participate fully in the Australian community.

The Office of Disability (OoD) has a leadership role in the provision of this information and the establishment of networks to address the needs of people with disabilities. The OoD can provide:

- advice on how to implement the Strategy
- advice on how to consult with people with disabilities including contact details for peak disability organisations and a publication entitled Inclusive Consultation

- assistance in providing information in accessible formats including a register of providers
- a range of publications designed to assist organisations to reduce discriminatory practices including Better Communication Practices, Better Physical Access and Better Employment Practices
- material such as case studies for inclusion in a wide range of training courses offered by Australian Government organisations
- assistance with raising awareness of disability issues including examples of good practice from which other organisations can learn
- advice on disability issues.

For further assistance, the Office of Disability can be contacted at:

Department of Family and Community Services

PO Box 7788

Canberra Mail Centre

ACT 2610

Tel: 1300 653 227

TTY: 1800 672 682

(http://www.facs.gov.au/disability/cds/cds/cds_index.htm)

A link to the agencies' recognised list of peak bodies can be accessed from <http://www.facs.gov.au/disability/cds/npdb.htm> or refer to Appendix 1: List of National Peak Disability Bodies as recognised by the Australian Government Department of Family and Community Services.

VET National Strategies: Shaping our future and projects outside the 2005 Framework – Reframing the Future

Reframing the Future is the national staff development and change management program funded through ANTA to assist with the implementation of the national training system. Since 1997, over 38,300 VET practitioners have participated in Reframing the Future projects. In this 2003 equity initiative, 54 Reframing the Future projects, with more than 1,300 participants, addressed the staff development needs of VET staff involved with equity groups.

The equity projects benefited from special funding provided by the Australian Government through ANTA and approved by the Australian Disability Training Advisory Council (ADTAC) and the Australian Indigenous Training Advisory Council (AITAC), and in particular by their Professional Development Sub-committees. Representatives from ADTAC and AITAC participated in the selection of the projects. This special funding enabled Reframing the Future to conduct up to 10 projects focusing on Indigenous strategies and up to 47 projects focusing on the Disability strategy.

In 2000 Ministers made a significant commitment to improving opportunities for people with a disability and Indigenous Australians through the *Bridging Pathways and Partners in a Learning Culture*, National Strategies and Blueprints for

Implementation. These documents, which run until 2005, assign specific responsibilities to a range of VET system and other partner organisations to improve VET outcomes for people with a disability and Indigenous Australians. Two national councils, the ADTAC and AITAC continue to monitor progress.

Both councils have broad membership drawn from industry, interest groups, government (including representatives from each State / Territory Training Authority and the Australian Government), ANTA and providers. In 2002/03 the Councils undertook a comprehensive review of the Blueprint progress and identified a number of critical areas for priority action in the next two years, including the need to:

- continue capacity building within the VET system with a focus on building the understanding and skills of VET system staff to actively support people with a disability and Indigenous Australians achieve successful outcomes and pathways to employment
- ensure the development and delivery of core products, eg training packages, are responsive to client needs and do not act as a barrier to engagement, and that every aspect of product design and delivery are inclusive and culturally appropriate
- improve employment outcomes
- do more in making available effective training pathways through practical access to nationally recognised training opportunities, and active fostering of pathways between lower and higher level qualifications
- build on the good will and collaboration that has characterised the first half of the Blueprints, and to increase strategic alliances that will help deliver desired outcomes.

Shaping Our Future – Australia’s National Strategy for VET: 2004–2010 was agreed by Ministers in November 2003. The National Strategy highlights the importance of diversity in growing a more skilled workforce, generating greater creativity and innovation and ultimately boosting the economy and supporting a more cohesive society.

For VET, it points to the need for the system to value and support diversity and to design products and services to suit all learners. This is reflected in Objective 2 of the Strategy.

(<http://www.anta.gov.au/dapfuture.asp>)

National Disability Employment Initiatives (NDEI)

Australian Government Department of Employment and Workplace Relations (DEWR)

There are a large number of national initiatives which work towards employment outcomes for this equity group. The primary feeder point for these programs is Centrelink, with the programs themselves now falling under the Australian Government Department of Employment and Workplace Relations (DEWR). This transition is continuing as the current portfolio exchange takes place between DEWR and FaCS. Some initiatives are listed, however, to investigate the extensive range of these programs, it is recommended that David Marshal at FaCS (tel: (08) 9229 1556) be contacted.

Personal Support Program (PSP)

The PSP is a Commonwealth-funded program, administered by FaCS. The program was announced as part of Australians Working Together in the 2001–02 Budget.

Australians Working Together is designed to encourage people on income support to stay connected to the economic and social life of the community.

PSP helps people who are vulnerable to social isolation and find it difficult to be involved in the workforce and/or the community. Participants may be facing homelessness, drug and alcohol problems, psychological disorders, domestic violence, financial management problems and/or long-term unemployment.

PSP endeavours to bridge short-term crisis assistance and employment-related assistance.

Personal providers help PSP participants to work towards economic or social outcomes. Social outcomes may include stabilised circumstances, increased community engagement, improved life skills, stable accommodation, increased self-esteem/confidence and accessing mental health services. Economic outcomes may include transferring to work programs, study and/or vocational training.

While getting a job is the ultimate goal, the program recognises that this may not be possible for all people at all times. Social outcomes may be a great personal achievement for some people.

The Program is open to:

- most people of workforce age who receive Commonwealth income support payments including Newstart Allowance, Youth Allowance, Parenting Payment, Disability Support Pension, Mature Age Allowance, Partner Allowance, Wife's Pension; Widow B Pension; Widow Allowance, and Special Benefit (in some cases)
- those aged 15 to 20 who do not receive any payment but are registered as job seekers with Centrelink
- participants for up to two years provided they meet their requirements.

(<http://www.together.gov.au/programmesAndServices/personalSupportProgramme/>)

Disability employment assistance

FaCS funds a network of some 400 non-Government providers to provide disability employment assistance through around 800 outlets nationally.

Disability employment assistance is targeted at job seekers with disabilities that are permanent, or likely to be permanent, and need **ongoing support** to gain and maintain employment.

There are two types of disability employment assistance services. These are:

- **Open employment services**, which assist job seekers to gain and maintain employment in the open employment market or to become self-employed. They provide training, job placement and on-the-job support. Each year open employment services help over 64,000 people with moderate to severe disabilities find and keep work.
- **Supported employment services** (also known as Business Services), which are commercial enterprises that predominately employ people with disabilities and provide both assistance and employment to job seekers in their business workplace, work crews and/or contract labour arrangements. Business services provide supported employment for 17,000 people with moderate to severe disabilities.

Some service providers operate using both of these models. Services can specialise in the type of assistance they provide or operate as a 'generalist service'. Disability employment assistance services provide a range of employment assistance and support services including:

- **Pre-vocational training**, where people with disabilities are assisted with the development of work-related skills in preparation for open or supported employment.
- **Vocational training**, where people with disabilities can learn specific job-related skills such as participation in a work team, resume preparation, job application skills etc.

- **Job placement and ongoing on-the-job support**, where people with disabilities are assisted by service providers to find job placements and to remain employed. Job seekers may receive initial, regular or intermittent support from the provider in order to ensure the job seeker is able to maintain employment.

(www.facs.gov.au/internet/facsinternet.nsf/disabilities/services-employment_services.htm)

Job Network

Job Network is a national network of private and community organisations dedicated to finding jobs for unemployed people, particularly the long-term unemployed. Whether you are a job seeker or employer, this site can help you. (<http://www.workplace.gov.au/Workplace/jobnetwork>)

National Industry Association for Disability Services (ACROD)

Given the complex challenges confronting the disability sector, up-to-date information is an essential resource for service managers. Through our publications, State/Territory forums, national conferences and issues-based committees and networks, ACROD's members receive a flow of timely information and analysis - in relation not only to government policies, programs and funding contracts, but also service delivery and management issues such as governance, risk, quality assurance and fund-raising.

Policy influence

ACROD provides a robust and independent voice to governments - federal, State and Territory - on behalf of disability services. It is represented on over 20 Commonwealth advisory groups and on numerous State and Territory committees. Through ACROD, members have an opportunity to influence government policy. The positions ACROD puts to governments are based on consultation with members, as well as being supported by research and argument.

Networking

Through forums, committees and other mechanisms, ACROD provides members with opportunities to meet each other, exchange information and, if they wish, form mentoring relationships or business partnerships.

(<http://www.acrod.org.au/about.htm>)

Department of Education, Science and Training (DEST)

Jobs Pathway Program (JPP)

The Jobs Pathway Program (JPP) helps young people make the transition through school and from school to further education, training or employment. JPP aims to assist those young people at risk of not making a smooth transition. Up to 70,000 young people aged 14 to 19, and over 1,600 schools, are serviced under the program each year. The Commonwealth provided around AUD\$23 million to fund

the program for the period 1 January 2004 to 31 December 2004.

A key feature of JPP is that participants receive assistance that is directed to their individual needs and is delivered in a personalised way. Assistance may include the provision of timely information and guidance on options, choices and consequences to help participants make key decisions about their future. JPP includes the development and implementation of a locally appropriate Transition Plan, and may also include motivation, problem solving, skills development, mentoring and assistance to access education, training and employment opportunities. JPP will also provide ongoing support for participants as they move through school and into their post-school destinations.

Where relevant, JPP providers refer young people to other local providers of support services, including:

- providers of education, training or employment services
- specialist agencies such as counselling, youth suicide or drug and alcohol services; and community groups that engage 'at risk' young people in sporting, cultural and recreation activities.

JPP providers take an active approach to managing participant transitions and utilise a wide range of early intervention and case management strategies to assist young people. JPP providers have good links with their community and schools, knowledge of local education, training and employment opportunities, and the ability to relate to young people. Organisations contracted to deliver JPP services include community-based organisations, group training companies, registered training organisations, employment agencies and schools.

(<http://www.jpp.dest.gov.au/Information/JPPQuickGuide.asp>)

National Regional Disability Liaison Officer (RDLO) Initiative

The RDLO initiative provides information, coordination and referral services for people with a disability interested in or enrolled in post-school education and training. It is complemented by the Disability Coordination Officer (DCO) Programme.

The RDLO initiative was established in 1994 with the aim of providing high quality coordinated services to students with a disability across the education and training sectors: schools, higher education and VET.

In 2001 the Government committed funding of AUD\$800,000 each year for the following three years for the national network of RDLOs. This funding is provided through the Higher Education Equity Programme (HEEP) which is administered by the Higher Education Group of DEST. Nine full-time and two part-time RDLO positions are hosted by universities.

In the Government's 2001 *Australians Working Together* package, funding was provided to establish a new DCO program which builds on the existing RDLO initiative. The DCO program, which commenced at the end of 2002, is

administered by the VET Group of DEST, but operates under similar principles and guidelines as the RDLO initiative. DCOs can be hosted by a range of organisations, including universities, TAFEs and community organisations.

Together the DCOs and RDLOs form an integrated national network of around 30 officers working to improve the coordination of service delivery to students with disabilities across the tertiary education sectors.

In conjunction with the DCO program, the RDLO network assists people with a disability to move between school, VET and higher education, or from the community into tertiary education and to suitable employment. The RDLO initiative seeks to:

- improve transitions for people with a disability between schools, post-secondary education and training and employment
- increase awareness of post-school options, supports and services available for people with a disability, their families, support networks and relevant stakeholders
- increase the successful participation of students with disabilities in post-secondary education by facilitating the coordination of services for people with a disability in education and training within a region
- improve linkages between schools, VET providers, higher education providers and providers of disability programs and assistance, such as those funded by FaCS.

RDLOs provide information to people with a disability interested in or enrolled in post-school education and training and refer them to appropriate service providers. RDLOs work with education and training providers in a given region (including universities, TAFE institutions, private VET providers and schools) to provide a central information source on support and services available for students and potential students with a disability to assist them to access the most appropriate post-school education and training.

The RDLOs work closely with key stakeholders, including disability liaison officers in universities and TAFE colleges, career counsellors, relevant staff in secondary schools and senior colleges within the region, and district and regional education office staff.

RDLOs undertake a wide range of activities, which may include the following:

- providing information and support to school leavers with disabilities to encourage them to make a successful transition to further education or training, usually in conjunction with secondary schools, senior colleges and other service providers, such as JPP providers; this can include providing information on courses and the support services available for students with disabilities, providing positive case studies and developing information materials and websites
- ensuring there is effective coordination, referral and collaboration among service providers in a region, eg by participating in State/Territory/regional level post-school education disability networks and engaging with relevant local agencies

- referring students and prospective students with a disability to appropriate agencies and, in particular, helping them to make contact with the appropriate institutional staff (most frequently, the disability liaison officers) who are responsible for direct support services such as enrolment assistance, career guidance, alternative teaching and learning approaches and so on
- facilitating the sharing of resources for people with a disability in education and training within the region; this entails building up a knowledge base of the support and resource services available, such as equipment, training of note takers, AUSLAN interpreters, communication aids
- referring graduates with disabilities to appropriate employment organisations in collaboration with other organisations, such as employment mentoring agencies and career services.

This list is not exhaustive. RDLOs have the capacity to respond to local needs for people with a disability within their regions. They will not replace or duplicate the work of disability support staff in education institutions (often known as DLOs – disability liaison officers) or other State/Territory funded providers of services for people with a disability.

(<http://www.dest.gov.au/highered/programmes/rdlo.htm>)

For contact details please refer to Appendix 2: Regions and contact details for DCOs and RDLOs.

Disability Coordination Officer (DCO) Program

The DCO Program provides information, co-ordination and referral services for people with a disability interested in or enrolled in post-school education and training. The DCO Program was announced as part of the Australians Working Together (AWT) package in the 2001–02 Commonwealth Budget.

The Program complements the RDLO initiative which has been operating since 1994. (See <http://www.dest.gov.au/highered/programmes/rdlo.htm>) The combined RDLO-DCO network's website is www.adcet.edu.au/rdco.

In conjunction with the RDLO network of officers, the DCOs seek to assist people with a disability move between school, VET and higher education, to succeed in their chosen studies and move to suitable employment. The Program seeks to:

- improve transitions for people with a disability between schools, post-secondary education and training, and employment
- increase awareness of post-school options, supports and services available for people with a disability, their families, support networks and relevant stakeholders
- increase the successful participation of students with a disability in post-secondary education by facilitating coordination of services for people with a disability in education and training within a region

- improve linkages between schools, VET providers, higher education providers and providers of disability programs and other assistance such as the Career Counselling Program, CRS Australia and those funded by FaCS.

Along with the RDLOs, the DCOs provide information, coordination and referral types of activities for people with a disability interested in or enrolled in post-school education and training.

They work with education and training providers in a given region (including public VET providers, such as TAFE institutions, private VET providers, universities and schools) to provide a central information source on supports and services available for students and potential students with a disability to assist them to access the most appropriate post-school education and training.

In consultation with relevant disability support staff, career counsellors and networks the DCOs, undertake the following activities:

- assist school leavers with a disability with transitional arrangements into VET or higher education, in liaison with secondary schools and senior colleges and other service providers such as JPP providers
- participate with State/Territory and regional level post-school education disability networks and other local service networks and agencies, such as community organisations, employment organisations and other bodies, to assist appropriate coordination, referral and collaboration
- promote VET and higher education to people with a disability, their families and support networks, including by providing positive case examples of people with a disability in VET and higher education
- provide information on courses and support services available in VET and higher education institutions to prospective students with a disability and via other providers of disability programmes such as CRS Australia and those funded by FaCS
- assist prospective students to link with appropriate institutional staff (eg DLOs) responsible for direct support services such as enrolment assistance, career guidance, orientation, advocacy, alternative assessment and examination requirements, bridging courses, personal and study counselling, tutoring, alternative teaching and learning approaches, study skills programs and student support networks
- facilitate sharing of resources for people with a disability in education and training within the region; this includes building up a knowledge base of support and resource services available, such as equipment, training of note takers, and resources for common courses, interpreters and communication aids.
- keeping a register of available learning support personnel, equipment and technology
- monitoring the availability and demand for such supports and services, where appropriate

- provide information on sources of expertise, or otherwise provide expertise in the range of supports available to people with a disability
- refer students/prospective students with a disability to appropriate agencies, as necessary, and educational and support services at a regional level, eg career services, health services, financial assistance, housing assistance, employment services and childcare
- provide information to people with a disability about other relevant Australian Government programs under which they may be able to receive assistance such as Career Counselling, Job Network, CRS Australia and those funded by FaCS for people with a disability
- provide information to relevant government bodies as appropriate; this may include identifying gaps in supports and services
- refer higher education and VET graduates with a disability to appropriate employment agencies in collaboration with other organisations such as employment mentoring agencies and career services.

The activities listed above are not intended to be exhaustive. The DCOs have flexibility to respond to local area needs for people with a disability within their regions. They do not replace or duplicate the work of the DLOs or other State/Territory funded providers of assistance/services for people with a disability.
(<http://www.dest.gov.au/ty/dco/>)

Job networks providers CRS Australia – vocational rehabilitation

The Australian Government funds the Commonwealth Rehabilitation Services (CRS) Australia to the value of AUD\$130 million to provide vocational rehabilitation services to people who have a disability or injury and need rehabilitation assistance to gain or retain unsupported paid employment, or to live independently. These services are currently provided nationally through 170 outlets. CRS Australia assists over 35,000 job seekers with disabilities annually to gain or retain employment.

CRS Australia is the largest provider of vocational rehabilitation programs in Australia with a 60-year history of providing quality services. Vocational rehabilitation helps people manage the effects of their injury, disability or health condition to benefit their quality of life and help them to get or keep a job.

CRS Australia has over 160 offices across Australia with 1,100 allied health professional and employment consultants who know and respond to the local requirements in the community. The agency helps people with a wide range of conditions covering physical, psychological and sensory conditions.

<http://www.crsaustralia.gov.au>

CRS Australia can be contacted through Marisa Leccese, Marketing Manager, on Tel: (08) 9239 7770.

Other network providers or rehabilitation agencies can be contacted through the Job Network initiative, through the National Office for Disabilities, or through David Marshal at FaCS on Tel: (08) 9229 1556.

Disability Employment Action Centre (DEAC)

Another such organisation is DEAC which is a Melbourne-based, not-for-profit organisation founded in 1984 to represent people with a disability. DEAC is recognised by and receives funding from FaCS, Office of Training and Further Education (OTFE), Centrelink and the philanthropic sector. DEAC aims to help make connections between VET providers, VET graduates with a disability, disability employment services, employers and mainstream recruiting agencies through the use of web-based information resources.

Through these resources it is hoped that the major stakeholders will become aware, familiar and comfortable with disability issues so that graduates with a disability from the VET system can employ their valuable skills and can compete in the Australian labour market.

<http://www.deac.org.au/>

Identify existing 2000-2004 Framework and 2005 Framework resources that are relevant to the 2005 Project objective

Including outcomes from Flexible Learning Leaders, LearnScope, New Practices in Flexible Learning, Resources in Teaching, Learning and Assessment, and Policy and Research Projects.

Please refer to Appendix 5: Project Resource CD-ROM: Flagship projects for the disability equity group which include:

New Practices in Flexible Learning (2004)

Indigenous learners in the digital age (Debbie Eagles); This Project aims to develop a new model that focuses on using web-based voice technology and digital tools to collect oral evidence. This model will also be useful for a range of other learners including those who are in remote locations, have low literacy levels, come from non-English speaking backgrounds or have a disability.

(<http://www.flexiblelearning.net.au/projects/indigenouslearners.htm>)

Flexible Learning Toolboxes: Truvision

Truvision is an online learning environment designed to enable blind and vision impaired learners to develop skills and expertise in elementary and advanced information processing strategies (it supports several IT competencies at Certificate I level). This will enable them to seek full-time employment within industry in such positions as administrative assistants, Help Desk personnel and data entry operators.

The core design of *Truvision* is a simulated workplace for the blind or visually impaired, featuring creative ways of engaging learners. The range of vision impairment means that a number of different specialised features have been used simultaneously. A graphical and highly visual interface was designed which allows for partially sighted people to optimise their visual perceptions, while providing detailed hidden text descriptions which can be read by screen readers for those with no vision. The product has been optimised for users of the screen reader Jaws 3.7 and the screen magnification product ZoomText 7.0.

(<http://flexiblelearning.net.au/toolbox/series4/419.htm>)

Access and Equity in Online Learning (2001)

Access and Equity in Online Learning identifies the needs of target equity groups in e-learning. It also focuses on guiding the equitable design and delivery of e-learning for all learners.

A range of products have been developed by the 2000-2004 Framework to assist RTOs to address the needs of target equity groups. These products include a range of literature reviews, research reports and guidelines to plan and implement accessible e-learning.

These products address the needs of the following learners:

- Aboriginal and Torres Strait Islander learners
- learners with disabilities
- learners with English literacy needs
- rural and remote learners
- women in VET
- isolated metropolitan learners.

Included in the product are a range of guidelines, dedicated to ensuring that all learners have a genuine opportunity to access and benefit from e-learning.

(<http://www.flexible-learning.net.au/projects/accessandequityonline.htm>)

Key findings/executive summaries

Provide a brief description of each of the research/projects identified including any key findings/ executive summaries and include contact details and links to relevant research/projects where possible.

Please refer to Appendix 5: Project Resource CD-ROM.

Case Study

Provide a case study of a peak organisation identifying how it currently uses AT to link clients back into the workforce.

As a sample I chose to model TAFE Western Australian (TAFEWA) as a peak training organisation. The initial model had been to contrast these results against an RTO which specialised in providing training for students with disabilities but did not integrate e-learning as part of this approach.

In this case, the sample sets were to include the TAFEWA RDLO, DCO and DLO contacts. The collaborative representatives included:

- CENTRAL TAFE –Disability Liaison Officer, Kim Pearse,
Tel: 1300 300 822
Email: Pearsek@perth.training.wa.gov.au
- CHALLENGER TAFE – Disability Services Manager, Judith Gillies,
Tel: (08) 9239 8200
Email: Gillij@fremantle.training.wa.gov.au
- SWAN TAFE – Disability Services Officer, Jodie Lord,
Tel: (08) 9274 1336
Email: Jodie.Lord@swantafe.wa.edu.au ,

- Disability Services Officer, Tony Vardaro,
Email: Tony.Varado@swantafe.wa.edu.au
- West Coast College of TAFE – Disability Liaison Officer, Caroline Hughes,
Tel: (08) 9233 1162
Email: Hughec@joondalup.training.wa.gov.au
- Pilbara College of TAFE – Disability Coordination Officer, Carolyn Biar,
Tel: (08) 9159 6700
Email: Carolyn.biar@pilbaratafe.wa.gov.au
- Great Southern TAFE – Disability Liaison Officer, Wendy Macliver,
Tel: (08) 9292 8741
Email: masliw@albany.training.wa.gov.au
- External Studies – Disability Officer, Queensland TAFE, Rosemary,
Tel: (07) 3259 4087
- The RTO specialist agency could not be reached within the time constraints of this study. The contact at the RTO was Russell Thom,
Tel: (08) 9250 4322
Fax: (08) 9250 4388
Address: Postal PO Box 1021 Kalamunda Perth WA 6076.

The case study was detailed to review TAFEWA not only against a specialist RTO but also to contrast it against some of the outcomes identified by Lamshed et al (2003) in *Keys to Access: Accessibility Conformance in VET*. To date, only one survey questionnaire has been returned. This is not surprising due to the period in which the study was undertaken. It is very likely that the rest of the sample sets will be returned early in 2005. The surveys will be then forwarded onto the Project team.

The questionnaire response can be referenced at Appendix 3: Case Study results for TAFEWA (Challenger TAFE). As the study has as yet not been able to be completed in full, further analysis was not conducted.

For further information, refer to McKenna (2003) *Making the connections; 48 ways to progress equity in the national vocational education and training system*, and Gurgone (2004) *Vocational education and training engaging with emerging technology – The Liberated Learning Project consortium*.

Researchers conclusions – issues for learners with disabilities

Summary of current issues for learners with disabilities in e-learning:

- User choice of accessible learning materials does not necessarily translate to good user choice. Accessibility needs to be defined in terms of both success on technical development as well as instructional design.
- Current accessibility and portability standards are not standards for instructional design.
- Most advances in the area of e-learning are secondary outcomes as benefits from one equity group translate across the spectrum of equity groups as a whole. Many of these advances have not been tapped into to generate outcomes for students with impairments. To date, the significant achievements in the VET research system have revolved around the progression of voice recognition software.
- Research to date has focused on how we use the technology rather than how best to use the technology in the classroom. There has been very little investigation into the pedagogies and andragogies for integrating assistive technologies options into instructional design within the Framework.
- The Disability equity group as a whole appears underrepresented in VET e-learning initiatives. The blind equity group has benefited the most at the expense of other equity areas due to development methodologies and processes that favour development for the blind.
- Primary issues for addressing engagement with this group through e-learning include the cost of computer equipment and assistive technology; compatibility of equipment; match between learning preferences and online delivery; and ways in which web pages may be designed.
- Problems have been found with the funding of AT and with the transition to employment or to further education and training, when access to AT may be lost.

Strategies/recommendations that improve employment opportunities for people with disabilities through the use of appropriate e-learning resources and technologies

- Need to focus on developing instructional design programs that specialise on subsets within the equity groups. By constraining the user group you create a stronger end product. This addresses the current trend in the VET system of providing choice rather than good choice.
- Professional development networks (Framework, LearnScope) that support the uptake of flexible learning and advocate customisation of online products must also focus on

training the trainer in the importance of accessibility and learning strategies outside the box. This is to address the marginalisation of equity user groups through the uninformed redevelopment of what was initially accessible material.

- Broader accessibility training will seed trainer capability to develop new content for targeted groups.
- National Disability Employment Initiatives (NDEI) needs to collaborate with appropriate representative bodies from peak agencies, from disability consumer organisations and from service providers. In the context of the research these agencies included but were not limited to collaboration with the RDLO network, DCO network, CRS Australia and the Australian Federation of Disability Organisations.
- There are numerous employment programs that are aimed at facilitating the transition between school, further education and employment for the disability equity group. The key organisations include ANTA, ADTAC, DEWR, DEST, FaCS, Centrelink, OoD and the Australian Employers' Network on Disability. The primary program outputs from this collaboration include Personal Support Program, Jobs Pathway Program, Jobs Network, Disability Employment Assistance, and Disability Open Employment Services.
- Need for consolidation and transference of WC3 guidelines across all training package support materials. Current practice in both the ANTA development style guide and Government guidelines as a whole isolate WC3 and accessibility to online materials, excluding CD-ROM, DVD and other formats from requiring the rigour of the Priority 1 quality assurance standards. This is a critical point with future developments in e-learning within the context of digital broadcast and DVD self contained Learning Management Systems.
- Expanding the network role of the AQTF auditors to include accessibility as a check for the materials to be noted by NTIS.

Appendix 1:

List of National Peak Disability Bodies as recognised by FaCS

Australian Association of the Deaf

PO Box 1083
Stafford QLD 4053
Tel: (07) 3357 8266
Fax: (07) 3357 8377
TTY: (07) 3357 8277
Email: aad@aad.org.au
Website: <http://www.aad.org.au>

Carers Australia

PO Box 73
Deakin West ACT 2600
Tel: (02) 6122 9900
Fax: (02) 6122 9999
Email: caa@carersaustralia.com.au
Website: <http://www.carersaustralia.com.au>

Deafness Forum of Australia

Churchill House
218 Northbourne Avenue
Braddon ACT 2612
Tel: (02) 6262 7808
TTY: (02) 6262 7809
Fax: (02) 6262 7810
Email: info@deafnessforum.org.au
Website: <http://www.deafnessforum.org.au>

Brain Injury Australia

PO Box 82
Mawson ACT 2607
Tel: (02) 6290 2253
Fax: (02) 6290 2252
Email: bianational@apex.net.au
Website: <http://www.braininjuryaustralia.com.au>

National Association of People Living with HIV/AIDS

PO Box 51
Newtown NSW 2042
Tel: (02) 9557 8825
Fax: (02) 9557 9461
Email: admin@napwa.org.au
Website: <http://www.napwa.org.au>

Australian Federation of Disability Organisations

Ross House
247 Flinders Lane
Melbourne VIC 3000
Tel: (03) 9662 3324
Mobile: 0419 312 129
Fax: (03) 9662 3325
Email: maryanne.diamond@afdo.org.au
Website: <http://www.disfed.org.au>

National Council on Intellectual Disability

PO Box 771
Mawson ACT 2607
Tel: (02) 6296 4400
Fax: (02) 6296 4488
Email: ncid@dice.org.au
Website: <http://www.dice.org.au>

National Ethnic Disability Alliance

PO Box 381
Harris Park NSW 2150
Tel: (02) 9287 8933
Toll free: 1800 629 072
Fax: (02) 9635 5355
TTY: (02) 9687 6325
Email: neda@neda.org.au
Website: <http://www.neda.org.au>

Blind Citizens Australia

PO Box 24
Sunshine VIC 3020
Tel: (03) 9372 6400
Freecall™: 1800 033 660
Fax: (03) 9372 9275
TTY: (03) 9521 1200
Email: bca@bca.org.au
Website: <http://www.bca.org.au>

Physical Disability Council of Australia

PO Box 77
Northgate QLD 4013
Tel: (07) 3267 1057
Fax: (07) 3267 1733
Email: pdca@pdca.org.au
Website: <http://www.pdca.org.au>

Appendix 2:

Regions and contact details for Disability Coordination Officers (DCOs) and Regional Disability Liaison Officers (RDLOs)

National Coordinator for DCO Program

John Murray

Vocational Education and Training (VET) Policy and Review Section

Vocational Education and Training Group

Tel: (02) 6240 8487

Fax: (02) 6240 9455

Email: john.murray@dest.gov.au

Disability Coordination Officers (DCOs) 18 regions, 20 positions: ten full-time and ten 0.5 FTE	DCO Contact Details	Regional Disability Liaison Officers (RDLOs) 10 regions, 11 positions: nine full-time and two 0.5 FTE	RDLO Contact Details
New South Wales			
North NSW covering the north coast and inland NSW, towns such as Coffs Harbour, Grafton, Kempsey, Port Macquarie, Armidale, Inverell, west to Walgett, south to Coonamble, Tamworth and north to Moree	University of New England DCO: Gwen Johnson Tel: (02) 6773 2130 Fax: (02) 6773 3619 Email: gwen.johnson@une.edu.au Address: C/- Equity Office, UNE Armidale NSW 2351	Hunter Valley Central Coast covering the Hunter Valley, central coast and inland, south to Gosford, north to Taree	University of Newcastle RDLO: Kay Dean Tel: (02) 4921 8844 Mob: 0438 218 848 Fax: (02) 4921 6939 Email: kay.dean@newcastle.edu.au Address: Special Education Centre, Callaghan NSW 2308 Website: http://www.newcastle.edu.au/rdlo
West NSW covering western NSW, towns such as Parkes, Orange, Bathurst, Griffith, north to Dubbo, south to Wagga Wagga, and west to Mildura	OCTEC Inc. DCO: John Clark Tel: (02) 6862 3700 Fax: (02) 6862 3700 Mobile: 0429 775 070 Email: j.clark@cww.octec.org.au Address: 247 Anson Street, Orange NSW 2800 Website: http://www.westdco.octec.org.au	Greater Western Sydney covering west Sydney, from Homebush in the east, the Blue Mountains in the west, Hawkesbury River in the north to Camden and Picton in the south	University of Western Sydney RDLO: Larissa Burns Tel: (02) 4570 1483 Mobile: 0409 073 366 Fax: (02) 4570 1960 Email: l.a.burns@uws.edu.au Address: c/- Social Justice Unit Locked Bag 1797 Penrith South DC NSW 1797 Website: http://www.uws.edu.au/rdlo

<p>Northern, Central and Southern Sydney covering northern, central and southern Sydney</p>	<p>Centre for Developmental Disability Studies DCO: Timothy Hart Tel: (02) 8878 0514 Fax: (02) 9807 7053 Mobile: 0417 441 327 Email: thart@med.usyd.edu.au</p> <p>Address: PO Box 6 Ryde NSW 1680</p>		
<p>South-East NSW covering the Illawarra and Southern Tablelands, Wollongong the South Coast and Hinterland</p>	<p>TAFE NSW – Illawarra Institute DCO: Vacant Tel: (02) 4295 2261 Fax: (02) 4295 2272 Email: denise.veitch@det.nsw.edu.au</p> <p>Address: Disability Unit Shellharbour Campus Illawarra TAFE PO Box 78 Shellharbour Square NSW 2530</p>		
Australian Capital Territory			
<p>Canberra (part-time position) covering the ACT and surrounding regions, such as Queanbeyan, Goulburn and Yass</p>	<p>Canberra Institute of Technology DCO: Rebecca Ryan Tel: (02) 6207 4900 Fax: (02) 6207 3189 Mobile: 0415 933 372 Email: rebecca.ryan@cit.act.edu.au</p> <p>Address: GPO Box 826, Canberra ACT 2601</p> <p>Website: http://www.disabilitycoordinationoffice.com.au</p>		
Victoria			
<p>North VIC and Border NSW covering North VIC and the Murray Valley, and some of southern NSW, towns such as Albury/Wodonga, Shepparton, Wangaratta, Echuca and Deniliquin, south-west to Bendigo, north-west to Swan</p>	<p>Goulburn Ovens Institute of TAFE DCO: Robena Binks Tel: 03 5833 2526 Fax: 03 5833 2512 Email: rbinks@gotafe.vic.edu.au</p> <p>Address: Fryers Street, Shepparton VIC 3630</p> <p>Website: http://www.gotafe.vic.edu.au/dco/</p>	<p>Western Victoria covering western Victoria, such as Mildura, Geelong, Hamilton, Horsham, Ballarat, Melton, Bacchus Marsh and Ararat, south to Warrnambool and the coast</p>	<p>University of Ballarat RDLO: Gary Kerridge Tel: (03) 5327 9956 voicemail only Tel: (03) 5327 9337 (TTY, 133 677 for voice callers and quote) Fax: (03) 5327 9602 Email: g.kerridge@ballarat.edu.au</p> <p>Address: Equity Unit PO Box 663 Ballarat VIC 3353</p> <p>Website: http://www.ballarat.edu.au/aasp/equity/</p>

Hill, and south-east to Mansfield and Bayside.			rdlo/
Central and South-West Melbourne covering central and south-west Melbourne and Bayside	RMIT University DCO: Natalia Klarica Tel: (03) 9925 3531 Fax: (03) 9925 3942 Email: natalia.klarica@rmit.edu.au Address: (Building 11) GPO Box 2476V Melbourne VIC 3001 Website: http://www.rmit.edu.au/ssg/dco		
North and East Melbourne and surrounds covering north Melbourne, most of east Melbourne, the Dandenongs, and surrounding regions north to Kilmore	RMIT University DCO: Joanne Webber Tel: (03) 9925 5269 Fax: (03) 9925 3942 Email: joanne.webber@rmit.edu.au Address: (Building 11) GPO Box 2476V Melbourne VIC 3001 Website: http://www.rmit.edu.au/ssg/dco		
Outer South-East Melbourne and East VIC East VIC (part-time position) covering east VIC, including Gippsland Outer south-east Melbourne (part-time position) covering outer south-east Melbourne	Central Gippsland Institute of TAFE DCO: Andrew MacLean Tel: (03) 5134 6377 Fax: (03) 5134 2463 Mobile: 0429 949 792 Email: andrewm@gippstafe.vic.edu.au Address: PO Box 3279 Morwell VIC 3841 Website: http://www.gippstafe.vic.edu.au/disprog/intro.html DCO: Sally Bailey Tel: (03) 9781 3388 Fax: (03) 9781 1998 Email: sally@skillsplus.com.au Address: Skills Plus PO Box 1162 Frankston VIC 3199		
Queensland			
Brisbane	The House with No Steps–QLD	Far North QLD	James Cook University

<p>covering most of Brisbane, Bayside and the Sunshine Coast to Maroochydore–Mooloolaba and Nambour</p>	<p>DCO: Wendy Hartnell Tel: (07) 5471 0750 Fax: (07) 5471 0751 Email: house@qldhwms.com.au whartnell@hwms.com.au Address: PO Box 1713 Noosaville DC QLD 4566 Website: http://www.disc.org.au/DCO</p>	<p>(part-time position) covering Cairns area, south to Tully, north to Thursday Island, west to Normanton</p>	<p>RDLO: Robert Pyne Tel: (07) 4042 1527 Fax: (07) 4042 1026 Email: Robert.pyne@jcu.edu.au Address: Smithfield Campus Cairns Equity Unit, PO Box 6811 Cairns QLD 4870 Website: http://www.jcu.edu.au/office/eandsd/rdo</p>
<p>Gold Coast and South Brisbane covering Tweed Heads, Coolangatta, Murwillumbah, south Brisbane inc Logan–Beaudesert, Mt Gravatt and Coopers Plains, south to Ballina and Lismore in NSW, and west to Ipswich</p>	<p>The House with No Steps–QLD DCO: Rhondi Williams Tel: (07) 5593 8340 Fax: (07) 5593 3410 Mobile: 0404 879 371 Email: rwilliams@hwms.com.au Address: PO Box 2213 Burleigh Mail Centre Gold Coast QLD 4220 Website: http://www.disc.org.au/DCO</p>	<p>North QLD (part-time position) covering Townsville area, north to Cardwell, south to Mackay, west to Mt Isa</p>	<p>RDLO: Robert Taylor Tel: (07) 4781 6292 Mob: 0421 357 735 Fax: (07) 4781 5885 Email: robert.taylor@jcu.edu.au Address: Douglas Campus Townsville Library Building Douglas QLD 4814</p>
		<p>Central QLD covering Rockhampton, north to Mackay, south to Bundaberg, and west to Longreach</p>	<p>Central QLD University RDLO: Eric Boardman Tel: (07) 4930 6394 Mob: 0438 639 400 Fax: (07) 4930 9199 Email: e.boardman@cqu.edu.au Address: CQ Mail Centre Rockhampton QLD 4702 Website: http://www.rdlo.cqu.edu.au</p>
		<p>South-West and Southern (non-metropolitan) QLD covering Toowoomba, north to Hervey Bay including Maryborough and Gympie, south to Stanthorpe, west to Cunnamulla</p>	<p>University of Southern QLD RDLO: Deborah McLachlan Tel: (07) 4631 1410 Fax: (07) 4631 2880 Email: mclachld@usq.edu.au Address: c/- Student Services, West Street, Toowoomba, QLD 4350 Website: http://www.usq.edu.au/student_services/disabilityservices/rdlo.htm</p>

South Australia			
<p>North SA (part-time position) covering Port Augusta, Port Pirie, Ceduna, Whyalla, Leigh Creek and rural/remote northern SA</p>	<p>Spencer Institute of TAFE DCO: Wendy Toop Tel: (08) 8648 9926 Fax: (08) 8648 9918 Email: wendytoop@sp.tafe.sa.edu.au</p> <p>Address: Port Augusta Campus PO Box 1870 Port Augusta SA 5700</p> <p>Website: http://www.portaugustalearning.com.au/dco/index.htm</p>	<p>Adelaide and environs covering Adelaide and surrounds, including Clare and Barossa Valleys and York Peninsula</p>	<p>University of South Australia RDLO: Leonie Challans Tel: (08) 8302 1756 Fax: (08) 8302 1500 Email: leonie.challans@unisa.edu.au</p> <p>Address: Human Resources (City East Campus) GPO Box 2471 Adelaide SA 5001</p> <p>Website: http://www.unisa.edu.au/hrm/EquityandDiversity/NRDLO/index.htm</p>
<p>South and Eastern SA (part-time position) covering the south and east of SA such as the Adelaide Hills, the South East and Riverland regions</p>	<p>Institute of TAFE DCO: Jayne Stacey Tel: (08) 8735 1542 Fax: (08) 8735 1400 Mobile: 0417 879 674 Email: jaynest@tafe.sa.edu.au</p> <p>Address: PO Box 1425 Mt Gambier SA 5290</p>		
Western Australia			
<p>South Perth and South WA covering southern Perth, Fremantle and southern WA, towns such as Bunbury, Kwinana and Albany</p>	<p>Edge Employment Solutions Inc. DCO: James Back Tel: (08) 9388 8550 Fax: (08) 9388 8440 Mobile: 0438 924 481 Email: james@edge.org.au</p> <p>Address: PO Box 1892 (47 Forest Street) Subiaco WA 6904</p> <p>Website: http://www.careertips.net.au</p>	<p>Central, North and East Perth covering most of Perth, south to Fremantle and north to Moora</p>	<p>Edith Cowan University RDLO: Jaye Johnson Tel: (08) 9273 8480 Fax: (08) 9387 7095 Email: jayej@ecu.edu.au</p> <p>Address: c/- Equity and Diversity 16.137 Pearson Street Churchlands WA 6018</p> <p>Website: http://www.ecu.edu.au/equity/accessedu</p>
<p>North WA (part-time position) covering the Pilbara, towns such as Port Hedland and Karratha</p>	<p>Pilbara College of TAFE DCO: Carolyn Biar Tel: (08) 9159 6748 Fax: (08) 9159 6840 Email: Carolyn.biar@pilbaratafe.wa.edu.au</p> <p>Address: Millstream Road, Karratha WA 6714</p>		

Eastern Goldfields (part-time position) covering east rural/remote WA, towns such as Kalgoorlie	Curtin University of Technology Vocational Training and Education Centre DCO: Jane Wagg Tel: (08) 9088 6048 Fax: (08) 9088 6034 Email: Waggj@kalg.curtin.edu.au Address: Locked Bag 22 Kalgoorlie WA 6430		
Tasmania			
North TAS (part-time position) covering north Tasmania, towns such as Launceston and Devonport	Institute of TAFE Tasmania DCO: Tammy Miller Tel: (03) 6421 5514 Fax: (03) 6424 7642 Email: tamara.miller@TAFE.tas.edu.au Address: TAFE Tasmania PO Box 1234 Burnie TAS 7320 Website: http://www.tased.edu.au/tasonline/gateways/index.htm	South and Central TAS covering Hobart, and south and central Tasmania	University of Tasmania RDLO: Jane Barrett Tel: (03) 6226 1796 Mob: 0419 364 585 Fax: (03) 6226 2059 Email: jane.barrett@utas.edu.au Address: GPO Box 252–2 Hobart TAS 7001 Website: http://www.tased.edu.au/tasonline/gateways/index
Northern Territory			
Rural NT and Central Australia North rural/ remote NT (part-time position) covering north rural/remote NT towns such as Batchelor, Katherine and Tennant Creek Central Australia (part-time position) covering Central Australia and Alice Springs	Human Services Training Advisory Council Inc. DCO: Peter Laming Tel: (08) 8981 2550 Fax: (08) 8981 9822 Email: projects@hstac.com.au Address: Human Services Training Advisory Council Inc., GPO Box 1557 Darwin NT 0801 Website: http://www.hstac.com.au DCO: Rob Bowman Tel: (08) 8953 3308 Fax: (08) 8953 7987 Email: dco@waltja.org.au Address: Waltja Tjutanga Palapayi Aboriginal Corporation PO Box 8274 Alice Springs NT 0871 Website: http://www.disabilitycentral.com.au	Darwin covering Darwin and surrounds	University of NT RDLO: Wendy Morton Tel: (08) 8946 6951 Fax: (08) 8946 6654 Email: Wendy.morton@cdu.edu.au Address: Student Facilities and Equity Division Darwin NT 0909

Appendix 3: **Case Study results for TAFE WA (Challenger TAFE)**

This questionnaire is expected to take 10 minutes.

PRIVATE AND CONFIDENTIAL

Name:	Judith Gillies
Position Title:	Disability Services Manager
Registered Training Organisation:	Challenger TAFE
Email address:	Judith.Gillies@challengertafe.wa.edu.au
Tel:	(08) 9239 8378

Instructions

When completing the survey please consider your contributions in the context that a person's impairment can result in a disability that could be physical, cognitive, sensory, behavioural or psychological.

The answers you provide may vary in length and require no specific format. If you find that you cannot answer a question please enter 'ILB' or 'Intentionally Left Blank'.

Questionnaire

1. What types of assistive technology options does your Registered Training Organisation (RTO) make available to students?

Currently only have a CCTV, 19" monitor, turbo mouse x 2; glare screens x 2. Large Keyboards x 4. We will purchase software to suit students' needs.

Dyslexic student has notes downloaded to disk and he had Kursweil reader at home.

Two AlphaSmart computers are being used by students with disabilities.

Hire equipment needed through ILC (Independent Living Centre) such as Cherry keyboard.

2. If provided, what proportion of RTO's assistive technology is:

- a) software-based?
- b) hardware-based?
- c) universal design?

Hardware: CCTV, Monitor, Mouse, Glare Screens; Alphasmart x 2

Large key - keyboards.

Software would include but is not limited to screen readers and audio to text converters

Hardware would include but is not limited to an alternative mouse and screen magnifiers.

Universal Design would include developing to best practice standards as indicated by WC3, ANTA and the Australian Flexible Learning Framework.

eg 30% : 30% : 40%

90% : 0% : 10%

Ratio:

3. Name and describe any support mechanisms (on-site and off-site, government and industry) for lecturers and students in the utilisation of assistive technologies.

Disability Services Unit at Challenger TAFE;

DSO contact with Independent Living Centre;

Blind Association of WA;

Spectrum, Quantum and other agencies

4. List any positive outcomes achieved which you have observed through student use of assistive technology in studying and moving into the workforce.

2003 Challenger TAFE student of the Year used assistive technology throughout his computing course. Now at Notre Dame University.

Visually impaired student used CCTV to enlarge texts to complete his course and continue to University.

5. List any barriers you have observed to students in achieving positive outcomes in the use of assistive technology in studying and moving into the workforce.

ILB

6. What mechanisms does your RTO use to best match students' needs with available assistive technology?

Contact ILC to do assessment, or ask student what his/her preference.

7. What mechanisms are used for assessing currency of assistive technology options available to students as provided by your RTO, eg industry feedback on appropriate workplace alterations that include assistive technology, student feedback, research, etc?

All of the above mentioned.

As your feedback will help inform the research team, please feel free to add any further comments:

PSEDN (Post Secondary Education Disability Network) WA Disability Officers from TAFE and Unis are having an Adaptive Technology day with Quantum and Spectronics in May 2005. Impulse Data often come to WA and speak with PSEDN.

Appendix 4:

Will This Help CD-ROM: A Program of the Tasmanian RDLO Initiative

To obtain a copy of the CD-ROM or for further information, please contact:

Spectronics Australia

Postal Address

PO Box 88
Rochedale
Queensland 4123
AUSTRALIA

Street Address

Unit E1 Commercial Court
130 Kingston Road
Underwood
AUSTRALIA
4109

Phone

(07) 3808 6833
+61 7 3808 6833 (International)

FreeCall Technical Support

1800 999 718

Fax

(07) 3808 6108
+61 7 3808 6108 (International)

E-Mail

mail@spectronicsinoz.com

Website:

<http://www.spectronicsinoz.com>

Appendix 5: Project Resource CD-ROM

This contains an exhaustive reference list, all of which were referenced in the collation of this report. For a list, please see References (see next page).

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
<p>Summary: Assistive Technologies for Online Training Delivery for People with Disabilities (R012RS) Access and Equity in Online Learning, 20/8/03</p>	<p>Rhonda Daniell</p>	<p>Defines the range of disabilities that are expressed by an impairment, discusses access barriers for people with disabilities, outlines what assistive technologies are as well as the range of what is available.</p>	<p>Training providers will need an awareness of the access and equity implications for people with disabilities at each point in online delivery including the most appropriate assistive technology and inclusive web design and content.</p>	<p>High Tech Center Training Unit (California Community Colleges) World Wide Web Consortium Access e-bility</p>	<p>http://www.flexiblelearning.net.au/accessequity/downloads/R012RS.pdf</p>	<p>Rhonda Daniell For more information contact: Phone: (07) 3247 5511 Fax: (07) 3237 0419 Email: enquiries@flexiblelearning.net.au Web: flexiblelearning.net.au</p>
<p>Everyone Online Guidelines, 2/10/2003</p>	<p>NA</p>	<p>The Australian Flexible Learning Framework's Guidelines to Universal Design of e-learning for Managers and Practitioners (Guidelines) which provides comprehensive information on accessibility and legal issues in the development and planning of online learning materials, has been officially endorsed by the Australian Disability Training Advisory Committee (ADTAC) and the Australian Indigenous Training Advisory Committee (AITAC).</p>	<p>The research identified the e-learning needs of learners with a disability, learners with low literacy and numeracy skills, women, Aboriginal and Torres Strait Islander learners and rural and remote rural learners. Additional research papers on Assistive Technology and the Digital Divide added to the body of knowledge and issues identified in these documents are included. The vocational education and training system's adoption of the principle of universal design in the development of e-learning resources has the potential to ensure appropriate responses are made to individual needs.</p>	<p>ADTAC and AITAC</p>	<p>http://flexiblelearning.net.au/accessequity/everyone_online/index.php</p>	<p>Rhonda Daniell daniellpr@ozemail.com.au Phone: (07) 3247 5511</p>
<p>Resource: Access and Equity in Online Learning: Report on Assistive Technologies for Online Training Delivery Project: Access and Equity in Online Learning 2002, 1/12/2002</p>	<p>Rhonda Daniell</p>	<p>This report identifies relevant policy and legislation; identifies types of assistive technologies for online learning for people with disabilities; describes assistive hardware and software; identifies principles of inclusive design, relevant standards and guidelines; and makes recommendations to assist policy and planning for online learning for people with disabilities.</p>	<p>In summary the issues for learners with disabilities are the: cost of computer equipment and assistive technology; compatibility of equipment; match between learning preferences and online delivery; and ways in which web pages may be designed. The research has identified strategies which if implemented would enhance online learning for people with disabilities.</p>	<p>Flexible Learning Advisory Group</p>	<p>http://flexiblelearning.net.au/accessequity/downloads/R012R.pdf</p>	<p>Phone: (07) 3247 5511 enquiries@flexiblelearning.net.au</p>

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
Online Student Services Checklist (F011), 24/06/2005	NA	Checklist for developing an accessible online course or service.	Is the IT infrastructure compatible with industry standards for assistive technology? Are students with a disability assessed to determine their assistive technology requirements? Are teaching staff trained to organise access to assistive technology? Are online materials and web pages designed in accordance with the W3C Accessibility Guidelines, Priority 1? Are conversions available for PDF formats? Can students access information provided in alternative formats preferred by students? (eg. sign language, Braille, etc) Are the materials in plain English and have the language and literacy levels been checked?	Australian Flexible Learning Framework	http://www.flexiblelearning.net.au/accessequity/downloads/F011.doc	Phone: (07) 3247 5511 enquiries@flexiblelearning.net.au
Summary: Learners with Disabilities (R011RSb) 2000 PROJECT REPORT Access and Equity in Online Learning, 1/01/2000	Rhonda Daniell	The project initiated national discussions in States and Territories with stakeholders in the vocational education and training (VET) system on the relevance of cultural, learning style differences to the delivery of learning by information and communication technologies. The full report on this website addresses the background, issues and barriers for ANTA targeted equity groups.	There are fundamental differences in the preferred communication media of people with special needs or functional limitations.	Australian Flexible Learning Framework	http://www.flexiblelearning.net.au/accessequity/downloads/R011RSb.doc	Rhonda Daniell daniellpr@ozemail.com.au Phone: (07) 3247 5511
Annotated Bibliography (R013B) Access and Equity in Online Learning, 1/01/2002	Rhonda Daniell	A comprehensive national and international literature search was conducted from March-May and an annotated bibliography developed as the outcome of this research. The annotated bibliography was divided into the following sections: Australian Policy Documents on online learning; General access and equity online issues; Learners with disabilities; Current projects dealing with equity and access issues in online technologies. The findings of this research were made available in May, 2000 and additions made to the annotated bibliography throughout the project. These additions include references identified by those consulted during the project. The annotated bibliography was posted at the project web site to stimulate discussion and to encourage further contributions throughout the project.	NA	Australian Flexible Learning Framework	http://www.flexiblelearning.net.au/accessequity/downloads/R013B.doc	Rhonda Daniell daniellpr@ozemail.com.au Phone: (07) 3247 5511

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
2000 Project Report (R011R) Access and Equity in Online Learning 1/01/2000	Rhonda Daniell	<p>The report embodies a view of online learning as an application or extension of the principles of flexible delivery and user choice. Students themselves are the central focus of concern, and this determines the main thread of the argument presented in the report. The cultural differences, needs and circumstances of students in the target groups make it essential that a student-centred model of online learning delivery be established as a key element in the VET system's commitment to access and equity. In this model, online technologies are perceived as tools to facilitate learning, and not as ends in themselves, nor as satisfactory substitutes for human interaction, the preferred and most suitable learning style for the Target groups. The approach to online learning advocated in the report therefore strikes a healthy balance between isolated engagement with the Internet, and direct inter-personal communication with teachers and fellow students. In setting up Internet-based learning materials for students, the emphasis must also fall on interaction and communication. The experience of the World Wide Web should be active and stimulating, requiring careful preparation of learning contracts, judicious selection of the Web material that the students are exposed to, and strict avoidance of Websites and pages that are dominated by densely packed text, on the one hand, or graphic profusion on the other. Plain English, simple layouts, and easy navigation are the major watchwords.</p>	<p>Recommendations were made in the areas of Planning and Coordination , Content and Delivery, Professional Development , Infrastructure, Dissemination.</p>	<p>Australian Flexible Learning Framework</p>	<p>http://www.flexiblelearning.net.au/accessequity/downloads/R011R.doc</p>	
Evaluation of Equity Toolboxes 2002, 1/09/2002	Phoebe Palmieri	<p>Six Equity Toolboxes were developed in 2002 - two each under the headings of disability, Indigenous, and literacy. The evaluation report examines the development process, acceptance of the products during implementation trials, and captured the experiences of stakeholder groups during the development process. The report highlights issues in adapting Toolboxes for equity groups and makes recommendations based on the experiences from these projects.</p>	<p>The accessibility methodology adopted in TruVision should be published so that other developers may use it as a template to assist in their compliance with accessibility guidelines.</p>	<p>Association for the Blind of WA, the Royal Victorian Institute for the Blind and the Royal Blind Society of New South Wales</p>	<p>http://flexiblelearning.net.au/toolbox/documents/Equity_Toolbox_2002_Evaluation_FINAL.doc</p>	<p>Phoebe Palmieri has prepared this final evaluation report for the Australian National Training Authority (ANTA) under the management of TAFE NSW Divisions, NSW Department of Education and</p>

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						Training.
Life Online, 1/10/2001	Lesley Wilson Jones	This document outlines the Life Online Program. Life Online is a learning program for adults with a mild intellectual disability. The program has eight topics: nutrition, menu planning, shopping, budgeting, electronic banking, money skills, travel, and community access.		Conferences/Visits, Diversity/ Equity, Technology	http://www.flexiblelearning.net.au/nw2001/01_attending/papers/5_8_Wilson-Jones.doc	
Guidelines to Universal Design of e-Learning for Managers and Practitioners (R014G) Access and Equity in Online Learning, 1/01/2002	Rhonda Daniell	The Guidelines provide further assistance for managers and practitioners when developing and delivering inclusive and accessible e-learning resources. They are not intended to replace the detailed considerations and recommendations of the specific reports but are general principles for ensuring that the development and delivery of e-learning materials are inclusive of all e-learners.	One size will not fit all. Assistive technologies are part of a continuum of technology available to all learners that will enhance their access to information and communication hardware and software. While the technologies apply to people who have permanently impaired abilities they are also usable by people with transient changes to their abilities.	Flexways: a web resource to identify professional development needs in the area of learning technologies and flexible learning, develop a professional development plan to meet those needs and access nationally developed resources for flexible learning. http://flexways.flexiblelearning.net.au/ The Australian Flexible Learning Community is an online professional development space for education and training practitioners interested in the application of new technologies for learning. http://flexiblelearning.net.au/community	http://www.flexiblelearning.net.au/accessequity/downloads/R014G.doc	Rhonda Daniell daniellpr@ozemail.com.au Phone: (07) 3247 5511
Tips for Web Developers Meeting the Priority 1 W3C Guidelines (F006) Access and Equity	NA	People who are blind or who have turned off images due to slow internet connections need content text presented in a variety of ways to ensure it conveys the same function or purpose as auditory or visual content. Icons and pre-recorded speech can make documents	Validate accessibility methods in the early stages of development	Australian Flexible Learning Framework World Wide Web Consortium	http://www.flexiblelearning.net.au/accessequity/downloads/F006.doc	Phone: (07) 3247 5511 Fax: (07) 3237 0419 Email: enquiries@flexi

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
in Online Learning, 1/01/2002		accessible to people with low literacy, cognitive disabilities, learning disabilities and deafness. An auditory description of a visual track benefits people who cannot see the visual information. People who cannot differentiate between certain colours and users with devices that have non-colour or non-visual displays will not receive information unless text and graphics are understandable without colour.				<p>blelearning.net.au</p> <p>Web: flexiblelearning.net.au</p>
Website Accessibility: Overview and Guidelines (R016G) Access and Equity in Online Learning, 23/06/1905	Rhonda Daniell	Overview of international requirements for making online material accessible.	Web usage is spreading rapidly into all areas of society and information must be available in formats that are readily accessible by all Internet users. The next step is to consider access to learning for all learner groups and embed Priority 1 in the Universal Design of Learning.	The Human Rights and Equal Opportunity Commission	http://www.flexiblelearning.net.au/accessequity/downloads/R016G.doc	<p>Phone: (07) 3247 5511 Fax: (07) 3237 0419</p> <p>Email: enquiries@flexiblelearning.net.au Web: flexiblelearning.net.au</p>
Indigenous learners in the digital age, September 9 2004	Debbie Eagles	This project aims to develop a new model that focuses on using web-based voice technology and digital tools to collect oral evidence. This model will also be useful for a range of other learners including those who are in remote locations, have low literacy levels, come from non-English speaking backgrounds or have a disability.	The initial objective was successfully achieved: the creation and design of an RPL/RCC model which incorporated a visually attractive, easy to navigate, online voice tool for the recording and submission of verbal responses for student application of recognition of RPL/RCC.	<p>New Practices in Flexible Learning</p> <p>University of Ballarat (TAFE Division)</p>	http://www.flexiblelearning.net.au/projects/indigenouslearners.htm	<p>Debbie Eagles,</p> <p>Project Manager</p> <p>Organisation: University of Ballarat (TAFE Division)</p> <p>State/Territory: Victoria</p>
E-learning and Students with Disabilities: From Outer Edge to Leading Edge, 1/12/1999	Professor Barrie O'Connor	Professor Barrie O'Connor's keynote address to the NET*Working 2000 conference highlights the importance of e-learning as a means of access to study by people with disabilities. The following issues are discussed: defining e-learning; the implications for post-secondary education; accommodating diversity through universal design (including the implications of the 'seven principles of universal design'); new approaches to teaching in five stages; and, embedding disability expertise across the educational institutions through various technologies and protocols. References and contact details are provided.	Teaching staff, learning resource services and IT staff need to become familiar with accessible Web design requirements and the availability of assistive technologies. They need to be aware of the potential barriers presented by multimedia and graphics-based information and how to deal with these challenges. While assistive technologies continue to fill the gaps that universal design is unable to address, Vanderheiden (1998) noted several problems with this approach. Accessible technologies: are often expensive when customised to an individual, are often unknown to those who might best make use of them, especially those who acquire	<p>Center for Applied Special Technology. Bobby [Online]. Available: http://www.cast.org/</p>	http://flexiblelearning.net.au/nw2000/main/key04.htm	<p>Institute of Disability Studies, Deakin University, 221 Burwood Highway, Burwood, Vic. 3125.</p> <p>Email: occonnor@deakin.edu.au web: http://www.hbs.deakin.edu.au/ids</p>

E-Learning for Target Learner Groups – Learners with Disabilities

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
			<p>disabilities late in life may be resisted by those who can best benefit from their use (eg. use of hearing aids among older people), may be overtaken by rapidly developing mainstream technologies to which they relate. Keller et al. (2000) found that some people with disabilities who were experienced in using computers were unaware of the access features already built-in to regular PC operating systems, which could have assisted them.</p>			
<p>Summary: Learners with Disabilities (R011RSb) 2000 PROJECT REPORT Access and Equity in Online Learning, 1/01/2000</p>	<p>Rhonda Daniell</p>	<p>Summarise the main issues arising from the report. Access and Equity in Online Learning – Stage 1 Strategy 2000.</p>	<p>This summary report outlines issues such as planning, content and design of websites with consideration of the World Wide Web Consortium W3C Accessibility Guidelines.</p>	<p>Australian Flexible Learning Framework</p>	<p>http://flexiblelearning.net.au/accessequity/downloads/R011RSb.pdf</p>	<p>Rhonda Daniell daniellpr@oze.com.au Phone: (07) 3247 5511</p>
<p>National Center to Improve Practice (NCIP)</p>	<p>NA</p>	<p>Website and instructional tool.</p>	<p>Designing accessible e-learning resources is not just about considering users with disabilities; sometimes the technology itself can be a disabling factor.</p>	<p>Flexible Learning Advisor Group</p>	<p>http://www.flexiblelearning.net.au/accessequity/everyone_online/page_3.php</p>	<p>Tel: 03 9412 4401 FLAG Secretariat Office of Training and Tertiary Education Department of Education and Training PO Box 266D Melbourne VIC 3001 AUSTRALIA</p>
<p>New Practices In Flexible Learning Just-In-Time Learning Assistant project report, 1/01/2003</p>	<p>Theo Kavadias</p>	<p>The Just-In-Time Learning Assistant project explores new practices in online development and blended or online delivery.</p>	<p>NA</p>	<p>New Practices in Flexible Learning.</p>	<p>http://www.flexiblelearning.net.au/projects/resources/np_yola_report.pdf</p>	<p>Julie Van Der Klift, 0418 951 601 Program Manager New Practices in Flexible Learning</p>
<p>The Economic and Social</p>	<p>Mike Dockery,</p>	<p>This paper reviews the current state of knowledge regarding the returns to participation</p>	<p>Differentiate between those with permanent disabilities from childhood and those</p>	<p>Institute for Research into International</p>	<p>http://www.anta.gov.au/images/publications/d</p>	<p>Professor Peter Kenyon,</p>

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Analysis of Increasing Opportunities for People with a Disability in VET, 1/02/2001	Elisa Birch and Peter Kenyon The Institute for Research into International Competitiveness (IRIC) Curtin Business School, Curtin University of Technology	in VET by persons with disabilities and offers a critical assessment of the findings and various approaches undertaken in previous studies.	developing disabilities after some labour force experience, or what might be termed as rehabilitation.	Competitiveness (IRIC)	isabilitiesapr01.pdf	Institute for Research into International Competitiveness , Curtin Business School, Tel: 08 9266 7683 Email: kenyonp@cbs.curtin.edu.au Web address: http://www.curtin.edu.au.eric/
Key success factors in placing and supporting new apprentices with disabilities through group training: findings of a national study, 1/07/2002	Gregory Lewis Ph.D.	This report has been produced as a result of the 2000 – 2005 blueprint for implementing the national strategy for people with a disability in vocational education and training, Bridging Pathways.	A significant finding to emerge from the structured interviews is that 20 of the 23 respondent GTOs had developed an ongoing partnership with one or more local disability employment agencies in their area. The disabilities of the apprentices currently being supported by the surveyed GTOs include: intellectual disability, learning disability, dyslexia, deaf, hearing impairment, blind, vision impairment, multiple sclerosis, cerebral palsy, Asperger's syndrome, amputee, club foot, attention deficit hyperactivity disorder, haemophilia, brain tumour, epilepsy, psychiatric, and nerve disorder. The trades that they are currently completing include: chef, carpenter, plumber, pastry cook, auto repairer, electro-technology, heavy vehicle mechanic, diesel mechanic, painter, welder, spare parts interpreter, horticulture, fabrication engineering, plasterer, coach builder, locksmith, boilermaker, mould and core maker, printer, radio mechanic, turf management, auto mechanic, cabinet maker, refrigeration mechanic, spray painter and electrician.	Equity Research centre	http://www.anta.gov.au/images/publications/ANTA-GroupTraining_disability_report.rtf	Gregory Lewis Ph.D. EDGE TRAINING SOLUTIONS PO Box 1892, Subiaco, WA, 6904 Group Training Australia Ltd Level 10, 28 Margaret Street, Sydney, NSW, 2000 P: 02 9299 6099
Key Success Factors In Placing and Supporting	Dr. Greg Lewis	The best practice guide examines 6 case studies drawn from 23 Group Training Companies who participated in an ANTA-	Importance and potential for establishing networks between RTO's, Disability employment agencies	Northern Group Training Ltd (NGT), On-Q Group Training,	http://www.anta.gov.au/images/publications/ANTA-	Edge Training Solutions. PO Box 1892

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New Apprentices with Disabilities: A Best Practice Guide, 30/08/2002		funded project which aimed to identify issues surrounding people with a disability in group training, and to identify examples of best practice in terms of collaboration between Group Training Companies and disability employment services.		Inner Eastern Group Training Inc. (IEGT), Riverina Group Training Organisation (RGTC).	Group_Training_disability_booklet.pdf	Subiaco Western Australia 6008 Telephone: (08) 9388 8550 • Email: greg@edge.org.au
Making the connections 48 ways to progress equity in the national vocational education and training system, 1/01/2004	Suzy McKenna	This publication provides insights into how vocational education and training (VET) practitioners and organisations are responding to a key challenge in implementing a national vocational education and training system in Australia – improving opportunities for equity groups, such as people with a disability and Indigenous people, to not only access but also to achieve successful outcomes from vocational education and training.	Disability challenges are surmountable in the profiles, sometimes the issues posed by disabilities in relation to providing training seemed insurmountable: for example, how to meet the needs of prisoners with intellectual disabilities. However, developing a sound grasp of the national training system and accessing disability support systems led many participants to invent innovative client-focused solutions.	Several of the profiles provide evidence of linkages to other professional development initiatives or national and state strategies that add value to all parties.	http://www.anta.gov.au/images/publications/making_connections_final.pdf	Australian National Training Authority Level 5 321 Exhibition Street GPO Box 5347BB Melbourne Vic 3001 Telephone: 03 9630 9800
Working with Diversity: Quality Training for People With a Disability, 10/08/2004	Rachel Robertson & Maxinne Sclanders of Nexus Strategic Solutions Jenna Zed of Burrany Bunitj and Heli Donaldson	Working with Diversity: Quality Training for People with a Disability - is one of three products that have been produced to assist registered training organisations and auditors provide quality services to learners, and to meet access and equity obligations under the AQTF. It outlines some of the key issues to consider when working with different client groups and explains such concepts as equity, diversity, cultural appropriateness and reasonable adjustment.	Key issues—outlines key issues RTOs face and provides suggestions.	NCVER	http://www.anta.gov.au/images/publications/QTDISABILITY.PDF	Australian National Training Authority (ANTA) Level 11, AMP Place 10 Eagle Street Brisbane QLD 4000 Phone: 07 3246 2300 Fax: 07 3246 2490 Website: http://www.anta.gov.au
Vocational education and training engaging with emerging technology, 2004	Compilation Edited by Susan Dawe	List of research reading, key articles: Vocational education and training engaging with emerging page 212, technology: The Liberated Learning Project consortium.	The use of this technology in the lecture and classroom setting at Central TAFE during this time has proved to be an innovative way of providing true universal access for students with special needs, particularly students with disabilities and non- English speaking background students.	Liberated Learning Project	http://www.ncver.edu.au/research/proj/nd3113.pdf	Ms Denny Burns Disability Liaison Officer Central TAFE 1300 300 822
The funding of vocational education and training for	Chris Selby Smith, Fran Ferrier	Tended to see the high priority areas for students with disabilities as including: extra assistive technology, so that the student with	Pricing and charging, including subsidies National Programs, New South Wales Traineeship Program for People with	NCVER	http://www.ncver.edu.au/research/proj/nr1018v2.pdf	NA

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students with disabilities, 26/06/2005		disabilities can be as independent.	Disabilities.			
Review of Research: Vocational education and training for people with disabilities, 1999	Nicholas Buys, Elizabeth Kendall, Jan Ramsden	The review has examined the available literature related to the access, participation and outcomes for people with disabilities. It explores the range of barriers to access as well as describing some innovative models and their associated success factors. People with disabilities continue to be under-represented in the sector. Nevertheless, the provision of adequate support for individual participants is a key factor in ensuring good educational outcomes and maintaining their levels of participation.	Examine the access, participation and outcomes that are currently being achieved by students with disabilities in the VET system determine the barriers that continue to confront these students; identify the factors that contribute to successful outcomes , review innovative models of service delivery both in Australia and internationally, outline major areas requiring further examination	NCVER	http://www.ncver.edu.au/research/proj/nr7012e.htm	NA
Against the Odds! 1/10/2002	Pelion Consulting	An underlying theme of this case study is that small, private Registered Training Organisations (RTOs) can collaborate, at a distance, to develop and implement flexible learning and that micro RTOs can enter flexible learning without expensive infrastructure and investment. A range of Australian Flexible Learning Framework products and services was found to be very useful in achieving this aim.	Design aspects that were considered in the light of people with disabilities included: use of highly contrasting colours for people who are colour blind/sight impaired; providing both audio and text versions for people who are deaf and/or on low bandwidth; use of plain English and clear explanations, glossary; limiting popup windows; large 'landing' zones for mouse pointers.	Registered Training Organisation project, Pelion Consulting Pty. Ltd., a Tasmanian based RTO and Elearn. WA Flexible Learning Leaders and LearnScope activities, EdNA Online site LearnScope Virtual Learning Community NET*Working The Online Guide to Resource Catalogues.	http://flexiblelearning.net.au/resources/casestudies/Pelion.pdf	Frankie Forsyth 69 Doyle Avenue Lenah Valley TAS AUSTRALIA 7008 Email: frankie@bigpond.net.au Phone: (613) 6278 9292 Mobile: 0419 513 255 http://www.pelion.com.au/moodle/
2002 RTO Case Study Project 'Flexible learning in practice'; Using the Australian Flexible Learning Framework to Increase Training Opportunities for Disadvantaged Clients, 1/11/2002	'ELearn	The following case study is one of 18 case studies that document the use and application of Australian Flexible Learning Framework products and services by Registered Training Organisations (RTOs).	Accessible and industry-driven: Developing learning and assessment objects for people who are blind or vision impaired who are also interested in gaining employment in the call centre industry. There are a number of barriers that continue to act against the employment of people who are blind or vision impaired in call centre occupations. Some of these are: Technology – headsets used in call centres generally do not cater for operators who are blind. A second channel is required to enable operators who are blind to receive	Elearn.WA Association for the Blind of WA Royal Victorian Institute for the Blind Royal Blind Society of NSW.	http://flexiblelearning.net.au/resources/casestudies/elearnwacasestudy.pdf	Linda Berichon Elearn.WA 11/569 Wellington Street Perth WA 6000 Phone: (08) 9 481 8022 email addresses: enquiries@elearn.wa.edu.au

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
			<p>voice feedback from their computer. In addition, most Customer Relationship Management (CRM) software installed in call centres does not work well with screen readers like JAWS or Window eyes. Training - lack of accessible online learning resources in the call centre industry means that people who are blind or vision impaired find it difficult to obtain the necessary skills to make them competitive in the labour market. Employment – many employers in the call centre industry do not understand that assistive technologies are available to ensure that people who are blind or vision impaired could function adequately in call centre occupations. Employers generally are not aware that there are subsidies and support available to place people with a disability into sustainable jobs.</p>			
Support resources for City/Country Student Differences in Accessibility and Support: Myth or Fact?, 1/08/2002	Jan Whitaker	This document lists reference materials to support the Net*Working 2002 discussion: City/Country Student Differences in Accessibility and Support Myth or Fact?	NA	Net*Working	http://nw2002.flexiblelearning.net.au/WebX?233@154.CbxKa2Z1aV6.461@f0c0ef2!enclosure=f0c308b	Jan Whitaker
Everyone Online?, 1/10/2001	Rhonda Daniell	<p>Achieving access and equity in online learning is more than providing an accessible web site, an issue that came into prominence during the Olympic Games in 2000. The Project Steering Committee that includes members of each of the national equity committees and represents the needs of target group members is committed to access and equity principles being embedded in the total development process of online learning and not a 'welded on' solution. All facets of the delivery of online learning including policy, infrastructure, program development and support services must include actions that meet the needs of all learners. A clear message from the work of the Access and Equity in Online Learning Project is: 'providing appropriate material for equity groups is, in the main, good practice for all teaching and learning, not an additional workload for practitioners and managers'. The</p>	<p>Additional skills are needed by people with disability: Use of assistive technologies - understanding the mechanics of computing and the organisation of the web page - design of web pages and documents must be consistent and clear to ensure people with disability using specialist programs can access the materials. Differing communication styles are required by people with disability: text for blind or vision impaired, colour and graphics rather than dense text, oral and music presentation, key board modifications and specialist input devices.</p>	WestOne Services	http://www.flexiblelearning.net.au/nw2001/01_attending/papers/7_3_Daniell.doc	<p>Rhonda Daniell For more information contact: Phone: (07) 3247 5511 Fax: (07) 3237 0419 Email: enquiries@flexiblelearning.net.au Web: flexiblelearning.net.au</p>

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		<p>vocational education and training system must aspire to a culture of universal design and access that will create a climate where attention to access and equity is an accepted part of the development of online vocational education and training.</p>				
<p>User Agent Accessibility Guidelines 1.0, 1/12/2002</p>	<p>WC3 (numerous authors)</p>	<p>This document provides guidelines for designing user agents that lower barriers to Web accessibility for people with disabilities (visual, hearing, physical, cognitive, and neurological). User agents include HTML browsers and other types of software that retrieve and render Web content. A user agent that conforms to these guidelines will promote accessibility through its own user interface and through other internal facilities, including its ability to communicate with other technologies.</p>	<p>The ability of conforming user agents to communicate well with assistive technologies will depend in part on the willingness of assistive technology developers to follow the same standards and conventions for communication. People with (or without) disabilities access the Web with widely varying sets of capabilities, software, and hardware. Some users with disabilities:</p> <p>May not be able to see, hear, move, or speak.</p> <p>May not be able to perceive, read, or process some types of information easily or at all.</p> <p>May not have or be able to use a keyboard or pointing device.</p> <p>Beyond this document, assistive technologies consist of software or hardware that has been specifically designed to assist people with disabilities in carrying out daily activities. These technologies include wheelchairs, reading machines, devices for grasping, text telephones, and vibrating pagers. For example, the following very general definition of "assistive technology device" comes from the (U.S.) Assistive Technology Act of 1998 [AT1998]:</p> <p>Any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional</p>	<p>Australian WC3 office</p> <p>http://w3c.dstc.edu.au/</p> <p>Web Accessibility Initiative (WAI)</p>	<p>http://www.w3.org/TR/2002/REC-UAAG10-20021217/</p>	<p>site-policy@w3.org</p>

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			capabilities of individuals with disabilities.			
ABLEDATA, 1/04/1996	ABLEDATA	ABLEDATA is a US database on assistive technology.	<p>The best sources of information on products available often are other consumers who have practical experience with the product(s) being considered.</p> <p>Speech-Input, Operating System, and Application Compatibility problems are so frequent, so difficult to resolve and so annoying that they need to be prevented from the start of any PC procurement.</p>	ABLEDATA	http://www.abledata.com/	<p>ABLEDATA 8630 Fenton Street, Suite 930 Silver Spring, MD 20910. Phone: 800/227-0216. abledata@orcmacro.com</p>
The Alliance for Technology Access, 1/12/2004	The Alliance for Technology Access	ATA is a support network as well as a providing a is a US database on assistive technology.	Joystick Buddy, Aurora 3.0 for Windows, Qpointer, ENABLE: People with Disabilities and Computers.	http://www.ataccess.org/hub/	http://www.ataccess.org/default.html	<p>Alliance for Technology Access, 1304 Southpoint Blvd., Suite 240, Petaluma, CA 94954 Email ATAinfo@ATAccess.org</p>
National Center to Improve Practice (NCIP), 1/12/2004	National Center to Improve Practice (NCIP)	The National Center to Improve Practice (NCIP), located at Education Development Center, Inc., was funded by the U.S. Department of Education, Office of Special Education Programs from 1992-1998 to promote the effective use of technology to enhance educational outcomes for students with sensory, cognitive, physical and social/emotional disabilities.	NA	National Center to Improve Practice (NCIP)	http://www2.edc.org/NCIP/	NA
Web accessibility learning modules, NA	California State University	The resource, developed by the California State University Center for Distributed Learning, deals with the why's and how's of accessibility. Includes: What is Web Accessibility; Legislative and Legal Issues; Assistive Technologies; Tips and Techniques; Checkers and Validators.	Understanding how computer users with disabilities experience the Web and the assistive technologies they use is a key component in making Web pages accessible. Without this understanding Web developers will be limited in their ability to effectively address the real problems and concerns of the disabled. Although there are many assistive technologies to help individuals with disabilities use computers.	Centre for Distributed Learning	http://www.csufresno.edu/webaccess/learning/modules/	<p>Candace Egan, Web Manager California State University, Fresno candace@csufresno.csu</p>

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The Need for Assistive Technology in Educational Technology, 1/01/2002	Terence Cavanaugh	This paper will address definitions, services, levels of technology and application of assistive technology concepts as they relate to education.	Media Services (1997), which states that educational technology "is the application of research, learning theory, emergent technologies, and child and adult psychology to solving instructional and performance problems."	National Council for Accreditation of Teacher Education (NCATE) (2000).	http://www.ace.org/pubs/etr/issue2/cavanaugh.cfm	NA
Perspectives on employing individuals with special needs, 1/08/2003	James P. Greenan, Mingchang Wu and Elizabeth L. Black	This study found that: there was a level of employer awareness of legislation, assistive technologies and vocational rehabilitation programs for people with disabilities; employers demonstrated a willingness to hire qualified individuals with disabilities; employers generally believed that people with disabilities possessed the fundamental job requirements such as general job skills, academic skills, attitudes toward work and interpersonal skills; employers believed that access to a community resource network would encourage them to hire people with disabilities, and desired financial aid to pay for remodelling facilities, purchase of assistive devices and staff and employer training programs.	Regarding difficulties in providing peripheral and assistive devices to employees with disabilities in employment, employers generally possessed uncertain and a variety of attitudes toward accessibility to relevant resources and the affordability of equipment. However, employers generally believed that assistive technology would be available to their businesses in order to enhance the employment of people with disabilities. In spite of some employers' statements that no problems existed with employees with disabilities, the open-ended responses indicated some reluctance toward applying assistive technology in the employment of people with disabilities.	UNEVOC	http://www.voced.edu.au/cgi-bin/get-td.pl?td=TD%2FTNC%2074.67	Vocational Education Research, PO Box 8288 Station Arcade, Adelaide SA 5000, Australia. Ph: +61 8 8230 8400; Fax: +61 8 8212 3436; email: lea-ann.harris@ncver.edu.au
Beyond W3C: TruVision - Enhanced Online Learning for People Blind Or Vision Impaired, 1/12/2001	Frank Bate	This paper describes the design and development of TruVision, an online learning environment designed to enable blind and vision impaired learners to develop skills and expertise in elementary and advanced information processing strategies. This will enable them to seek full-time employment within industry in such positions as administrative assistants, help desk personnel and data entry operators.	A. A balanced approach to accessibility B. Raising the benchmark for accessibility in online learning C. Leadership in accessibility in online learning	Elearn WA	http://www.flexiblelearning.net.au/knowledge/tree/edition01/html/_download/truivision_pape_r_ejournal.pdf	Frank Bate Elearn.WA frank.bate@elearn.wa.edu.au
Sharing Knowledge: Final Report on 2001 Contract, 3/04/2003	Jack Gilding and Lin Thompson, Backroad Connections Pty Ltd	The Resources Database has been produced as planned. A print version is available at http://flexiblelearning.net.au/sharingknowledge/keydocs.htm and the underlying database has been provided to the FLAG Secretariat for incorporation in the Australian Flexible Learning Framework website.	Index of Quick Guides http://www.flexiblelearning.net.au/guides/index.html http://www.tafefrontiers.com.au/static/TF_Usability/about.htm	TAFE Frontiers OTEN	http://flexiblelearning.net.au/sharingknowledge/skkeyres.pdf	Matthew Jackson Project Officer Australian National Training Authority GPO Box 3120 Brisbane QLD

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
			http://www.tafefrontiers.com.au/catalogue?action=show_resource+id=aes0202502142f+mode=search			4001 Phone: (07) 3246 2339 Email: jacksonm@anta.gov.au
Accessibility specification for content development, 1/12/2002		The Le@rning Federation Accessibility Specification for Content Development describes accessibility principles, requirements and guidelines for creating accessible online curriculum content for The Le@rning Federation (an initiative of State and Federal Governments of Australia and New Zealand).	Accessibility metadata The Le@rning Federation adds standards-based metadata to all learning resources distributed online. Definitions for all metadata elements are published in The Le@rning Federation Metadata Application Profile. The metadata includes an Access profile element used to indicate which accessibility profiles have been considered in the design of the content. An Access profile is assigned within the metadata where content has been specifically designed to facilitate the learning experience for users who match that profile. That is, the content provides some help to users typical of the profile. The content is not, however, guaranteed to be suitable for all learners in the designated profile.	W3C	http://www.thelearningfederation.edu.au/tlf2/sitefiles/images/documents/Accessibility_Specification_V2_0.pdf	Extensive list of contacts at this link (state and territory based) http://www.thelearningfederation.edu.au/tlf2/s/howme.asp?noDelID=52
Educational Soundness Specification, 11/07/2002	Curriculum Corporation and education.au limited	Within the context of this specification, educational soundness refers to the capacity of online curriculum content to successfully promote student learning.	Online content will be accessible when it: <ul style="list-style-type: none"> • complies with accessibility standards for students with disabilities and for rural and remote communities • utilises the capacity of multimedia to support student acquisition of standard Australian English or standard New Zealand English • provides specific language support for students whose first language is not English • is appealing to and inclusive of students of all genders, socio-economic groups, ages, races and cultures. 	http://www.cast.org/ud/	http://www.thelearningfederation.edu.au/tlf2/sitefiles/images/documents/educational_soundness_specification_v2_2.pdf	Extensive list of contacts at this link (state and territory based) http://www.thelearningfederation.edu.au/tlf2/s/howme.asp?noDelID=52

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The basic e-learning tool set, 6/08/2003	Curriculum Corporation and education.au limited	Basic E-learning Tool Set (BELTS) has been developed to demonstrate two major functions: content management and distribution, and content use. Content management and distribution includes the ability to receive, store, update and distribute learning objects. The usage functions include the ability to find and sequence learning objects into an activity, to control access to that activity, and to download learning objects to a user's desktop.	The Le@rning Federation (TLF) has developed and released an open-source project called Basic E-learning Tool Set (BELTS). This section describes BELTS and outlines the purpose of the project (last updated 6 August 2003).	Collaborative Networks in content, ie, Curriculum Area Reference Groups (CARG, or CARG's)	http://www.thelearningfederation.edu.au/tlf2/showMe.asp?nodeID=98	Extensive list of contacts at this link (state and territory based) http://www.thelearningfederation.edu.au/tlf2/showme.asp?nodeID=52
Style Guide — Training Package Support Materials, A guide for developers of ANTA managed Training Package support materials, 1/01/2003	Australian National Training Authority	This guide is aimed at developers who have entered into a consultancy agreement with the Australian National Training Authority (ANTA) to produce Training Package support materials.	The Web Content (W3C) Accessibility Guidelines (refer to www.w3.org/TR/WAI-WEBCONTENT) deal specifically with reduction of barriers on Web pages, which people with physical, visual, hearing, and cognitive/neurological disabilities may encounter. The Guidelines recommend that developers: provide equivalent alternatives to auditory and visual content, do not rely on colour alone, use markup and style sheets properly to clarify natural language usage, create tables that transform gracefully, ensure that pages featuring new technologies transform gracefully, ensure user control of time-sensitive content changes, ensure direct accessibility of embedded user interfaces, design for device-independence, use interim solutions, use Web content (W3C) technologies and guidelines, provide context and orientation information, provide clear navigation mechanisms, ensure that documents are clear and simple.	W3C	http://www.anta.gov.au/images/publications/style_guide.pdf	ANTA Project Coordinator, Quality Assurance Training Package Support Materials. Australian National Training Authority (ANTA) Tel: (03) 9630 9800 Tel: (07) 3246 2300
Developing e-learning content Australian Flexible Learning Framework Quick Guides series, 31/07/2003	Australian National Training Authority	The Guide provides an overview of the processes and some of the things to consider when developing content for e-learning and describes some useful resources that may assist. This Guide is particularly targeted at those working in the Australian vocational education and training (VET) system.	Importance of effective educational design	Open Training and Education Network , OTEN, Learning Network Queensland, NCVER, Queensland Open Learning Network	http://www.flexiblelearning.net.au/guides/content.pdf	Australian National Training Authority Level 5 321 Exhibition Street GPO Box 5347BB Melbourne Vic 3001 Telephone: 03 9630 9800

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Draft Report: Series 5 Accessibility Learning Outcomes, September 4, 2003	Anthony Quinn Pasquale Stella	<p>In the period 2002-2003, the National Toolbox Project Management team (NTPM) expanded the approach to achieving Accessibility. This approach included:</p> <ul style="list-style-type: none"> • Accessibility evaluations carried out on early development prototypes as part of OTTE's QA process. The evaluations identified many common issues across the entire range of toolboxes produced by a variety of developers. • Inclusion of a week-long focussed email discussion forum. This forum provided a way for Toolbox developers to leverage off the combined knowledge of various Toolbox developers and experts in the field. • A subsequent regression evaluation carried out on pre-release versions of each of the Series 5 Toolbox product betas. (This was still in progress at the time of writing). • Ongoing forum discussions and debates on issues that arose during Toolbox development. <p>This document draws on the collective experiences of the Series 5 Toolbox developers, testers and National Project Management Team.</p>	<p>The best way to cater for all of these different requirements is to provide alternative ways to access the important learning content in your Toolbox.</p> <p>Summary of Common Issues</p> <p>The most common accessibility problems occurred with relation to</p> <ul style="list-style-type: none"> • Flash, multimedia content and interactive features) • Scripts (typically Javascript). • Opening new windows as pop-ups • HTML Forms • HTML Tables • Frame titles 	Check references	http://flexiblelearning.net.au/toolbox/toolbox6/workshop/03/Series_5_Draft_Accessibility.doc	<p>Anthony Quinn</p> <p>Access Testing Centre</p> <p>112 Alexander Street</p> <p>Crows Nest NSW 2065</p> <p>Tel: (02) 9467 5000</p> <p>Email: anthonyq@testingcentre.com</p>
<p>Increase the number of people with a disability who are seeking employment rather than receiving the Disability Support Pension or other benefits</p> <p>Enhance business and community understanding of employment for people with a</p>	Suzanne Colbert	<p>The experience to be gained in the project provides an ideal opportunity to feedback to Government what employers need if they are to take up programs to increase the employment of people with a disability. Research has shown that Australian businesses do not necessarily have the confidence, skills, or knowledge to successfully employ people with a disability without additional help.</p>	Networks of employers supporting the engagement of disabled employees	Check members	http://www.emad.asn.au/	<p>Suzanne Colbert</p> <p>Phone: 1300 363 645</p>

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<p>disability, so that they are seen as a diversity group rather than people in need of charity.</p> <p>Increase the number of jobseekers with a disability who succeed in finding genuine employment, 19/07/2004</p>						
'Nothing about us without us Empowering ourselves and others!', 1/11/2004	Sue Egan	Conference brief		Physical Disability Council of Australia	http://www.pdca.org.au/cgi-bin/pdca/documents/conference/programme.pdf	Sue Egan, Phone: 07 3267 1057 email: pdca@pdca.org.au
Equity In Practice Conference - Towards 2010, 2-3 September 2002	NA	The ANTA Equity in Practice Conference, held 2-3 September 2002 in Melbourne, is the premier national event for vocational education and training (VET) practitioners working to get better outcomes in VET for all Australians - including people with disabilities, Indigenous Australians, women and people from non-English-speaking backgrounds.	NA	http://www.emad.asn.au/	http://www.anta.gov.au/equityinpractice/default.asp	ANTA equityinfo@anta.gov.au
Accessibility Conformance and Implementation in VET, 1/08/2003	Reece Lamshed, Bernadette Delaney, Dr Marsha Berry, Laurie Armstrong	Interview with Reece Lamshed	I think we're going to find great variation and I think what we're going to put forward is an idea that there is a policy implementation plan that can be adopted and that professional development to the staff and to the development teams is really important to have training so that they know about accessibility standards and know how to achieve them.	Binary Blue	http://www.flexiblelearning.net.au/knowledge/tree/edition03/html/res_reeceLamshed.html	Binary Blue
e-learning: emerging issues and key trends A discussion paper, 1/09/2003	Frank Bate	The authors comment on current and possible events in other sectors that may influence the shape of e-learning in VET. The paper considers issues and developments of a technical, organisational and pedagogical nature that are likely to generate change in the	The LO model is excellent as a set of standards for technical development but needs to be moderated with actual user contexts. The authors conducted a survey of the news and events items for the last 12 months from the website of key	IMS Consortium, W3C, EdNA, Prometheus, EduSpecs, The Learning Federation	http://www.flexiblelearning.net.au/knowledge/tree/edition04/pdf/elearning250903final.pdf	

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		<p>use of technologies in education and training. The paper offers a view of the driving forces for e-learning, an historical context for its development, and a vision for the future with recommendations for the Australian Flexible Learning Framework. In this paper e-learning is discussed with particular emphasis and relevance to online learning and web-based technologies, as these represent the area where most of the effort and data is available. This includes the use of ICT to support face to face delivery, blended learning, and fully online implementations, and covers a variety of technologies from e-mail to Integrated Learning Systems (ILS), stand-alone or networked. The paper does not focus in detail on emerging technologies for instruction, such as mobile technologies, as the aim is to provide a broad view of issues as they relate to the VET sector.</p>	<p>organisations (IMS, IEEE, Cancore). It showed that the future development of technical specifications and standards in e-learning could be characterised as:</p> <ul style="list-style-type: none"> • Continual development and refinement of specifications and standards. An increasing dissemination and embedding of e-learning standards and specifications. • Outreach to academic, business, industry or government professionals to promote the value and use of specifications and standards and enhance their development. • Work on extension of specifications and standards into areas of new technology and applications and application linking such as interactive content and runtime systems. <p>As yet, however, there is no definitive and agreed standard, but a recognised set of emerging standards that are adapted to suit a particular organisational need or development goal. The development of technical standards is not a process that is 'half way complete' as the advent of new technologies and applications to e-learning necessitates that they emerge and develop with ongoing usage.</p>			
<p>The Rise of Learning Objects, 1/03/2004</p>	<p>Stephen Downes</p>	<p>Review of the current state of play with regard to Learning Objects</p>	<p>I think that although we are reaching the end of the introductory phase of learning objects, though we are finally beginning to see the use of learning objects on a wider scale, I feel that what we have in fact reached is only the first stage of the eventual transformation of learning. What we have reached today, in my view, is the successful transition of traditional learning from the pre-electronic age to the post-electronic age. But what we are doing is still rooted in this traditional approach to learning.</p>	<p>Stephens Web http://www.downes.ca/</p>	<p>http://www.itdl.org/Journal/Mar_04/editor.htm</p>	<p>stephen downes stephen@downes.ca</p>
<p>Connecting the dots - a successful</p>	<p>Catherine Clark</p>	<p>The project will develop a snapshot of available pathways, including barriers, to ensure that</p>	<p>Not released</p>	<p>Centre of Excellence for Students who are</p>	<p>http://www.ncver.edu.au/aboutncver/contact.htm</p>	<p>Catherine Clark Centre of</p>

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<p>transition from vocational education and training to work for deaf students</p> <p>10322, not yet published</p>		<p>students are able to achieve more satisfying jobs commensurate with their skills and training.</p>		<p>Deaf and hard of hearing</p> <p>Northern Melbourne Institute of TAFE</p>	<p>tmi?PHPSESSID=ccb8f537e50d72f354ed81935d61a0bf</p>	<p>Excellence for Students who are Deaf and hard of hearing</p> <p>Northern Melbourne Institute of TAFE 71-90 St Georges Rd PRESTON VIC 3072 phone: 03 9269 8306 fax: 03 9269 8315 email: cathycvp@nmit.vic.edu.au</p>
<p>Keys to Access Accessibility conformance in VET, 1/01/2003</p>	<p>Reece Lamshed</p> <p>Dr Marsha Berry</p> <p>Laurie Armstrong</p>	<p>To reveal and understand the obstacles that may be blocking conformance and suggest strategies that will speed conformance.</p>	<p>Unfortunately, it appears that accessibility implementation may often be considered on the basis of a risk analysis (is it likely a person will complain?), "Dispelling the Myths - Web Accessibility is for All" (Arch, 2002) for instance, Arch identifies that over half of the WAI checkpoints apply to a broader community of users – not just those with disabilities.</p>	<p>WebAIM</p>	<p>http://pandora.nla.gov.au/pan/41456/20040416/www.flexiblelearning.net.au/projects/resources/accessibility-conformance.pdf</p>	<p>Reece Lamshed</p> <p>Binary Blue, 03 9481 1080</p>
<p>Implications of new learning technologies for adult literacy and learning, 1/01/2004</p>	<p>Regie Stites</p>	<p>This paper examines the role of new learning technologies in adult education and learning in the USA.</p>	<p>Considerable evidence is found to suggest that new learning technologies do improve learning outcomes. It is noted that barriers to the widespread use of such technologies are still high.</p>	<p>NA</p>	<p>http://www.voced.edu.au/cgi-bin/get-iso8.pl?off=54418287&db=voced&patlist=Design%7CInstructional</p>	<p>National Centre for Vocational Education Research, PO Box 8288 Station Arcade, SA 5000, Australia. Ph: +61 8 8230 8400; Fax: +61 8 8212 3436; email: lea-ann.harris@ncver.edu.au</p>
<p>'Life Online': access to online resources for adult</p>	<p>Kerri A. Weeks</p>	<p>Access to online resources for adult students with a mild intellectual disability</p>	<p>Existing materials that incorporate online delivery are generally inappropriate for adult students with a mild intellectual</p>	<p>NA</p>	<p>http://www.voced.edu.au/cgi-bin/get-iso8.pl?off=39646789&</p>	<p>National Centre for Vocational Education</p>

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students with a mild intellectual disability, Australian journal of adult learning , vol. 41 , no. 3 , November 2001, p. 407-415, 1/01/2001			disability. Often they require skills and knowledge levels above the initial capabilities of this group, and also are based around topics that are not age appropriate.		db=voced&patlist=Inst ructional%20Design%7 Cdisability	Research, PO Box 8288 Station Arcade, Adelaide SA 5000, Australia. Ph: +61 8 8230 8400; Fax: +61 8 8212 3436; email: lea-ann.harris@ncver.edu.au Document delivery service in accordance with Australian copyright laws and regulations.
TD/NSW 68.08 TAFE NSW TAFE NSW Online part 3: access and equity for online learning / TAFE NSW. In Training agenda , vol. 9 , no. 4 , November 2001, [4] p; 1/11/2001	TAFE NSW	The TAFE NSW Online project seeks to meet the needs of TAFE students by offering flexibility and accessibility through the provision of online learningware in a growing number of courses. With growth comes the issues of access and equity. Common barriers include poor web design, older technologies and slow Internet services. The Option Keys website at provides a comprehensive set of guidelines for planning a website to ensure access and equity. The case study illustrating this article concerns the Sydney Organising Committee for the Olympic Games (SOCOG).	NA	NA	http://www.voced.edu.au/cgi-bin/get-iso8.pl?off=39323644&db=voced&patlist=Inst ructional%20Design%7 Cdisability	NSW TAFE Clearinghouse, Education and Training Information Service, OTEN-DE, 51 Wentworth Road, Strathfield NSW 2135, Australia. Ph: +61 2 9715 8297; Fax: +61 2 9715 8292. Available to libraries only. Other sources: Subscription (January 2002): The Editor, Training Agenda, KDC Consulting, PO Box 1332, Burwood NSW 1805, Australia. Ph: +61 2 9715 2222; Fax: +61 2 9715 2299; email: editing@kdc.com.au

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
<p>Designing accessible learning materials. In TAFE NSW Research Association conference: papers presented at 1997 conference held at Sydney Institute of Technology Ultimo Campus December 1997. p. 163-173; 1/12/1997</p>	<p>Ann MacCann</p>	<p>This article explains how the Open Training and Education Network (OTEN) has addressed this issue.</p>	<p>NA</p>	<p>NSW TAFE Clearinghouse, Education and Training Information Service, OTEN-DE</p>	<p>http://www.voced.edu.au/cgi-bin/get-iso8.pl?off=18955821&db=voced&patlist=Instructional%20Design%7Cdisability</p>	<p>NSW TAFE Clearinghouse, Education and Training Information Service, OTEN-DE, 51 Wentworth Road, Strathfield NSW 2135, Australia. Ph: +61 2 9715 8297; Fax: +61 2 9715 8292. Available to libraries only.</p> <p>Our availability policy.</p>
<p>TruVision The story of a partnership that aspires to achieve universal design in online learning, 1/01/2002</p>	<p>Frank Bate</p>	<p>Discussion of the outcomes of the TruVision project as well as advocacy for the adoption of Universal design</p>	<p>NA</p>	<p>Association for the Blind of WA, the Royal Blind Society, Royal Victorian Institute for the blind</p>	<p>http://www.elearn.wa.edu.au/papers/anta_equity_conference_2002.pdf</p>	<p>Help Desk to support the implementation of TruVision. Frank Bate</p> <p>frank.bate@elearn.wa.edu.au</p>
<p>Beyond W3C: TruVision - Enhanced Online Learning for People Blind Or Vision Impaired, 1/01/2002</p>	<p>Frank Bate</p>	<p>This paper describes the design and development of TruVision, an online learning environment designed to enable blind and vision impaired students to develop skills and expertise in elementary and advanced information processing strategies to enable them to seek full-time employment within industry in such positions as administrative assistants, help desk personnel and data entry operators.</p>	<p>A fundamental requirement of Toolbox resources is the need to exhibit effective teaching and learning approaches. A second important consideration concerns product utility characteristics. Toolboxes are expected to allow for wide applicability across the target audience for whom they are intended.</p> <p>Toolboxes are also expected to be widely accessible. They are expected to operate on client computers running at 300 MHz and guidelines are provided to developers for aligning the Toolboxes with:</p> <ul style="list-style-type: none"> • The EdNA metadata standards; 	<p>The Association for the Blind of WA (Inc)</p> <p>-The Royal Blind Society (NSW)</p> <p>-The Royal Victorian Institute of the Blind</p>	<p>http://www.elearn.wa.edu.au/papers/edmedia_2002.pdf</p>	<p>Frank Bate</p> <p>frank.bate@elearn.wa.edu.au</p>

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			<ul style="list-style-type: none"> • The W3C content accessibility guidelines (Priority 1); and • The Preferred Standards Project. 			
TAFE Frontiers Flexible Learning Week 2003, 1/01/2003	Frank Bate	<p>The eLearning report card in Australian VET: What have we learnt? So what do I hope to achieve in this session?</p> <ol style="list-style-type: none"> 1. Review what we have been talking about in the last 5 years. 2. Draw out some common themes. 3. Hopefully, provide some insights into ways of anticipating and responding to flexible learning opportunities. 4. Pose some questions. 	Using eLearning to respond to niche markets (corporate, equity, schools).	LearnScope, Networking, Flexible learning leaders	http://www.elearn.wa.edu.au/papers/flexible_learning_week_2003.pdf	Frank Bate frank.bate@elearn.wa.edu.au
Rethinking models of literacy provision for the 21st century, 1/06/2004	Robyn Jay	Focuses on a multiliteracies model of literacy provision and describes how new technologies can be used to enhance the development of these 'literacies' and re-engage marginalised learners.	<p>We need to adopt a revised constructivist approach that focuses on 'designing for learning' rather than the 'planning for teaching' models (Gagnon & Collay n.d.) so often employed in our VET organisations. We also need to look beyond traditional teaching approaches to community based options that will better engage, not only those traditional educational systems have marginalised, but all learners. The integration of new technologies into our teaching practice will enrich the opportunities available to students, and the likelihood of successful outcomes, while ensuring that learning is meaningful for students, and connected to their interests and understandings about the world.</p> <p>Finally it is important to remember that the real issue continues to be the quality of teaching, not the amount of technology. In our push for flexible learning solutions we need to focus on the learner and the community. Through effective blended learning strategies we can give all</p>	Knowledge Tree	http://flexiblelearning.net.au/knowledgetree/edition05/download/Jay.pdf	Robyn Jay robyn@gecko-ed.com

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Flexible Learning Leaders 2003 Final Report, 1/12/2003	Sharon Rice	To re-engage vulnerable groups into education and training requires an open mind, an open heart and absolute flexibility of practice.	<p>members of society a voice in the ever increasing global community.</p> <p>Teaching and learning must be delivered in partnership arrangements with industry and community.</p> <p>The engagement of vulnerable groups requires high level pedagogy, innovative and culturally responsive approaches and absolute flexibility in delivery.</p> <p>A one-size-fits-all is out of date and particular approaches for specific clients is the way of the future.</p> <p>Flexible delivery should be taken out of the hands of technocrats and saturated with pedagogy in order to come up with real learning solutions, particularly for disadvantaged groups.</p>	Knowledge Tree	http://www.flexiblelearning.net.au/leaders/fl_leaders/fl103/final/rice_sharon.pdf	<p>Sharon Rice</p> <p>Acting Director of the School of Engineering, Swinburne University of Technology</p> <p>SRice@groupwise.swin.edu.au</p>
An evaluation of the Regional Disability Liaison Officer initiative, 1/02/1999	<p>Stephen Kable</p> <p>Penny Heath</p> <p>Higher Education Division</p> <p>Department of Education, Training and Youth Affairs</p>	An evaluation of the initiative was conducted by the Evaluation and Monitoring Branch of DEETYA in late 1997. The main aims of the evaluation were to assess the outcomes of the initiative in terms of their effectiveness in assisting students with disabilities in higher education and to discuss possible future directions for the initiative.	<p>Overall the findings for the evaluation indicated that the initiative has had a positive impact on the provision of services and information to students and disability practitioners across the education sectors. The main strengths of the initiative according to key disability players (RDLOs, Disability Liaison Officers, Equity Officers, TAFE representatives and the chair of the RDLO management committee) include:</p> <ul style="list-style-type: none"> · The establishment and strengthening of networks between disability workers, students, institutions, businesses and the community. · Facilitation and coordination of disability services. · The provision of information and advice to students with disabilities. · Raising the profile of students with disabilities within the tertiary education 	Regional Disability Liaison Officer	http://www.dest.gov.au/archive/highered/otherpub/rdlo_summary.htm	

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			<p>sector.</p> <ul style="list-style-type: none"> The ability of the RDLOs to address disability issues from a wider perspective ie across schools, TAFE and higher education institutions. 			
<p>Guidelines for the jobs pathway programme (JPP)</p> <p>1 January 2004 – 31 December 2004</p>	<p>DEST</p>	<p>These guidelines form part of the Funding Agreement and set out the administrative requirements for JPP providers. If there is any conflict between the Funding Agreement and these guidelines, the Funding Agreement shall apply. The Department of Education, Science and Training (the Department) reserves the right to amend these guidelines from time to time. In making such amendments, the Department may consult with the national representative group of JPP providers prior to the implementation of any change. JPP providers will be advised of such changes in writing.</p>	<p>A key feature of JPP is that participants receive assistance that is directed to their individual needs and is delivered in a personalised way. Assistance may include the provision of timely information and guidance on options, choices and consequences to help participants make key decisions about their future. JPP includes the development and implementation of a locally appropriate Transition Plan, and may also include motivation, problem solving, skills development, mentoring and assistance to access education, training and employment opportunities. JPP will also provide ongoing support for participants as they move through school and into their post-school destinations. Where relevant, JPP providers refer young people to other local providers of support services, including:</p> <ul style="list-style-type: none"> providers of education, training or employment services specialist agencies such as counselling, youth suicide or drug and alcohol services; and community groups that engage 'at risk' young people in sporting, cultural and recreation activities. 	<p>Jobs Pathway Programme</p>	<p>http://jpp.dest.gov.au/Documents/GuidelinesJan2004/GuidelinesJan2004.pdf</p>	<p>Jenifer Leary,</p> <p>John Walton 02 6240 8843</p> <p>Marg sykes, marg.sykes@dest.gov.au</p> <p>Kate.Robertson@dest.gov.au</p>
<p>ANTA 2003b, Implementation Plan 2003: Australian Flexible Learning Framework for the National Vocational Education and Training System 2000-2004; 2003</p>	<p>NA</p>			<p>FLAG</p>	<p>http://flexiblelearning.net.au/aboutus/keydocuments.htm</p>	

Title & publication Date	Author	Description	Key Findings	Pointers to Networks	Address	Contact
<p>Australian Flexible Learning Framework for the National Vocational Education & Training System 2005-2007 Business Plan 2005, 1/12/2004</p>	<p>Julie Ahern</p>	<p>Framework Business Plan 2005</p>	<p>Goal- A flexible VET system which meets diverse client needs and helps them succeed in a global environment.</p> <p>Purpose is to increase the sustainable uptake of quality e-learning in vocational education and training.</p> <p>Component 1: Client engagement, to strengthen the role of industry, individuals and communities in shaping VET provision to meet their needs.</p> <p>Component 2: Provider flexibility and innovation, to build the capacity of the VET workforce and VET organisations to use information and communications technologies to improve service delivery.</p> <p>Component 3: VET System support to improve the policy, regulatory and system environment and VET business models which affect the uptake of e-learning.</p>	<p>FLAG</p>	<p>http://flexiblelearning.net.au/aboutus/resources/aflframeworkbusinessplan2005.pdf</p>	<p>Julie Ahern Executive Officer Flexible Learning Advisory Group (FLAG) Telephone: 03 9637 2672 Facsimile: 03 9637 3764 Email: ahern.julie.l@edumail.vic.gov.au</p>
<p>Speech Recognition – the future is out there Liberated learning Project</p> <p>An innovation to Improve Access to Higher Education Using Speech Recognition Technology,</p>	<p>Keith Bain Ms Di Paez</p>	<p>There are a host of questions generating from the initial conceptualisation phase, which will be addressed through the life of this Project. For example, an obvious question is the effectiveness of speech recognition for real-time transcription and display of university lectures. If speech recognition does work then information needs to be gathered on the impact on learning and pedagogy. Furthermore, by the end of the Project the outcome needs to be able to go beyond the subjective and declare with confidence the value and utility of speech recognition for the lecture theatre, firstly for students with disabilities and then for non-disabled students and teachers.</p>	<p>The Liberated Learning Project involves an intricate interaction of technological and human resources. As with any technological application in its infancy, there are obstacles to overcome before the Liberated Learning concept is more universally applicable. A few of the more pressing project challenges are:</p> <ul style="list-style-type: none"> • Improving recognition accuracy. As a lecturer delivers a lecture, the displayed text must be accurate and convey the intended message. • Reducing the occurrence of errors. Errors affect the overall conceptual understanding of the lecture and thus remain our primary focus. • Integrating non-obtrusive punctuation markers. Currently, speech recognition 	<p>Liberated Learning Project</p>	<p>http://www.canberra.edu.au/pathways/papers/bain.pdf</p>	<p>LIBERATED LEARNING PROJECT</p> <p>Atlantic Centre of Support for Students with Disabilities</p> <p>Saint Mary's University Halifax, Nova Scotia, Canada, B3H 3C3</p> <p>Work: 1 902-496-8741 Fax: 1 902-496-8122</p> <p>patricia.macmill</p>

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			<p>software requires the speaker to actually say the marker in order to have it appear (i.e., speaker says "period" or "new paragraph"). One challenge is to find a non-obtrusive way of integrating these markers to enhance readability and thus comprehension.</p> <ul style="list-style-type: none"> • Developing a model capable of effecting better learning and teaching. Lecturers must be able to learn the software quickly and use it easily. The project will be looking specifically at the efficiencies of editing a lecture transcript produced via speech recognition software. • Determining the right mix of associative technologies: sound card, operating system, microphone technology, memory, storage, etc. • Customising IBM's ViaVoice speech engine for lecture use. • Ensuring as many elements of the research, as is possible, are standardised to ensure universal comparison. • Improving the technical model's cost efficiencies - an important task when considering more universal application of the Liberated Learning concept. 			<p>an@STMARYS.CA</p>
<p>Draft Working Document – Learning outcomes from Accessibility testing of Toolbox Series 5 prototypes.</p> <p>DE&T VIC OTTE Program Development Branch , September 4,</p>	<p>Anthony Quinn</p> <p>Access Testing Centre</p>	<p>In the period 2002-2003, the National Toolbox Project Management team (NTPM) expanded the approach to achieving Accessibility. This approach included:</p> <ul style="list-style-type: none"> • Accessibility evaluations carried out on early development prototypes as part of OTTE's QA process. The evaluations identified many common issues across the entire range of toolboxes produced by a variety of developers. • Inclusion of a week-long focused email discussion forum. This forum provided a way for Toolbox developers to leverage off the 	<p>Summary of Common Issues (the most common accessibility problems occurred with relation to):</p> <ul style="list-style-type: none"> • Flash, multimedia content and interactive features). • Scripts (typically Javascript). • Opening new windows as pop-ups. • HTML Forms. 	<p>Access Testing Centre</p>	<p>http://www.flexiblelearning.net.au/toolbox/toolbox6/workshop/03/Series_5_Draft_Accessibility.doc</p>	<p>Anthony Quinn</p> <p>Access Testing Centre</p> <p>112 Alexander Street</p> <p>Crows Nest NSW 2065</p> <p>Tel: (02) 9467 5000</p>

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2003		<p>combined knowledge of various Toolbox developers and experts in the field.</p> <ul style="list-style-type: none"> • A subsequent regression evaluation carried out on pre-release versions of each of the Series 5 Toolbox product betas. (This was still in progress at the time of writing). • Ongoing forum discussions and debates on issues that arose during Toolbox development. <p>This document draws on the collective experiences of the Series 5 developers, testers and National Project Management Team.</p>	<ul style="list-style-type: none"> • HTML Tables. • Frame titles. 			<p>Email: anthonyq@testiingcentre.com</p>
Meeting the technology needs of students with disabilities in post-secondary education, 1/11/1999	<p>Paul Leung</p> <p>Janet Owens</p> <p>Gayle Lamb</p> <p>Kaye Smith</p> <p>Jenny Shaw</p> <p>Renee Hauff</p>	<p>The purpose of this study is to explore assistive technology (AT) use by students with disabilities in post-secondary education settings through a literature review and a survey. The survey was designed to identify current practice and what students with disabilities who use AT, Disability Liaison Officers, and AT service providers believe to be issues and concerns. The study is considered to be a first step in looking at use in post-secondary education within an Australian context.</p>	<p>Assistive technology is and will remain important in providing access to post-secondary education for some students with disabilities. It ranges from the relatively simple and inexpensive to extensive overhauls of computing infrastructure.</p>	<p>Quality and Equity Section in the Higher Education Division of the Department of Education, Training and Youth Affairs</p>	<p>http://www.dest.gov.au/archive/highered/eip99-6/eip99_6.pdf</p>	<p>General enquiries (03) 5227 1100</p>

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<http://www.facs.gov.au>

Australian Federation of Disability Organisations' (AFDO) or the 'Federation'

<http://www.disfed.org.au>

CRS Australia

<http://www.crsaaustralia.gov.au>

Disability Coordination Officer Programme

<http://www.dest.gov.au/ty/dco/>

Disability Employment Action Centre (DEAC)

<http://www.deac.org.au/>

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<http://www.elearn.wa.edu.au/truvision/>

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