

Australian *Flexible Learning* **Framework**

Supporting Flexible Learning Opportunities

An environmental scan research paper to inform the 2007 project 'Inclusive e-learning – mature age workers'

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An environmental scan research paper to inform the 2007 project 'Inclusive e-learning – mature age workers'

Introduction

This report provides an overview of recent research, activities and organisations related to mature age workers and learners, with a particular, but not exclusive, focus on e-learning. It is intended to support the 2007 project on mature age workers within the Australian Flexible Learning Framework. The context is provided by the project brief:

In 2005-6 the Inclusive e-Learning Project has supported the uptake of e-learning for young people and learners with a disability. In 2007 the project will also consider the extent to which e-learning can facilitate learning outcomes for a third target group, **mature age workers**. Strategies will include new exemplar programs which provide members of this group with opportunities to experience e-learning and engage with interactive learning methods, tools and assessment strategies based on new technologies.

The 2007 project will consider the extent to which e-learning can facilitate learning outcomes for a third target group: mature age workers. Mature age workers are identified by COAG as a key group in its national reform agenda. The development of new skills and qualifications for mature age workers, particularly those seeking to re-enter the workforce or maintain employment is crucial to greater participation in productive work.

An initial step to inform the conduct of 2007 exemplar projects will be an environmental scan of relevant research, projects and initiatives, both within and external to the Framework, related to the VTE training and e-learning needs of mature age workers seeking to re-enter the workforce or maintain employment; particularly those workers needing the re-focus their employment because of changes in the economy, use of new technology or their own lifestyle circumstance. This will include investigations of existing jurisdictional work, identification of peak agencies and support groups, employment opportunities for mature age workers and priority areas of need for which e-learning may be applicable.

This relates to the 2007 Inclusive e-Learning Project objective:

- To learn more about how e-learning can support the needs of mature age learners.

The ageing population in general, and mature age workers in particular, have been in recent years the focus of an increasing amount of government-supported and other research in Australia and overseas. A smaller proportion of the research deals specifically with e-learning for older workers. In this report, the subject of e-learning is discussed within the broader context of the needs of mature age workers. A number of publications propose good practice guidelines for older learners or workers; some of these are applicable to e-learning just as much as to other forms of learning.

Infrastructure and initiatives building on research are necessarily a step behind the research, and so it has proved in this case. The number of organisations and initiatives supporting learning for older people is sparse, far fewer than those supporting youth or people with a disability. An outline is provided of those that have been discovered.

Definition: mature age workers as learners in VET

Mature age workers are defined as those aged 45 and above. While they share some characteristics, they do not form a uniform group, but can be sub-divided as follows:

- People in employment who wish to upgrade their skills to cope with changes in their existing jobs;
- People in employment who wish to upgrade their skills in order to seek promotion in the same or a similar company;
- People in employment who are considering a substantial change in direction;
- People not at present in employment who are seeking to reskill in order to enter the workforce, including:
 - People who have been retrenched;
 - Retirees intending to start up a small business or to embark upon a different or less demanding type of work;
 - People wishing to enter or re-enter the workforce after some time away.

NCVER's summary of vocational education and training statistics (NCVER, 2006) shows that in 2005 learners aged 45 or over made up 20.7% of the Australian VET student population.

The same source indicates that 44.3% of students (of all ages) reside outside metropolitan areas, a fact with implications for e-learning arrangements.

Current literature

Literature on the subject of mature-age workers in e-learning is scarce. A search was conducted using the key words mature-age, older, workers, learners, online, e-learning, and technology. An overview of the results is provided here. As well as literature on mature-age workers and e-learning, a small amount of literature under the more general headings of mature-age learners and of online learning is discussed.

Mature age learners and e-learning

The subject of pedagogy for online learning is discussed by Schiller (2003), who examined ways in which lecturers can facilitate interaction in online teaching, and investigated the possibility of establishing online communities among older learners who are not oriented to computers. The use of a number of structured strategies de-mystified the computer environment and provided a setting for informal interaction. Concentrated attention by the lecturer was also a successful component. The result was that the mature age learners who were previously nervous about online study gained markedly in confidence.

In a similar vein, Heaperman & Sudweeks (2001) examine the ways to enable older students to gain confidence in using virtual learning environments. They suggest a number of factors which are of assistance. These are grouped into 'factors of personal impact' and 'control factors'; the latter include awareness, peer support, training, structure, coping strategies, software, hardware and the physical environment.

Along with lack of confidence goes the attribute of 'learned helplessness', which is commented on by Leigh (2000), who found an unexpected impact on the learning experience of older students, with consequent implications for lecturers.

A particular group, mature-age rural women, is the subject of a recent thesis (Meyers, 2006). Research into the experience of a group of these women revealed a number of issues that affected their educational experience, including student readiness, access, support, isolation, increased flexibility, gender, and negative online behaviours.

A project using learning object technology to develop educationally sound online learning environments (Quinton, Dreher, Fisher, & Houghton, 2005) developed an evaluation model related to the needs of older learners. The authors discuss the learner preferences and the needs of mature aged people, and assert that the online environment can improve the quality of learning if these are taken into account.

A particularly useful paper (Taylor & Rose, 2005) reports on a project which researched strategies for the successful engagement of older learners in ICT learning, by means of four case studies. Positive factors were identified as:

- peer support, mentoring and tutoring
- the teacher/trainer; including tutors and volunteers
- slower paced, low intensity training
- self-paced learning
- informal learning environment
- small classes or groups
- clear and explicit visual instructions
- similar aged cohort
- English language literacy integrated with ICT literacy skills development (for NESB learners)
- personal interest
- potential employment outcomes
- good print resources
- ongoing (lifelong learning)
- hands on practice activities
- relevant "real world" activities

Potential barriers to learning were identified as:

- Age-related barriers
- print size - accessibility of print resources (a preferred learning strategy);
- small size of text in web address bar that cannot be changed
- focus - changing focus from screen to workbook to keyboard
- pace - time limits on training courses, and sessions that move too quickly can be stressful

- English language literacy (for NESB learners)
- Computer literacy:
- Physical set-up of computer rooms – ability to see projected demonstration.
- Formal training programs for those preferring independent learning
- Skills level too high.

Mature age learners in general

A far larger field of literature on this topic can be found. Included here are items particularly useful for the current project.

A detailed and influential report (Gelade, Catts, & Gerber, 2003), identifies criteria for good practice in educational programs for older people. These are based on research conducted for the project in Australia, as well as data collected from Australia and overseas. The good practice criteria are grouped in five inter-related themes:

- Creating a safe, non-threatening environment
- Negotiating the processes of learning
- Motivating learners
- A different approach to learning
- Organisational innovation and outcomes.

The report stresses the need for personalised support in the initial stages to enable older learners to overcome barriers to learning. This finding, like the good practice criteria, is echoed in much other literature.

A similar subject is investigated by means of a scan of literature and existing training programs by Baldwin (2002). It provides some good practice suggestions at a broader level than Gelade et al., and also gives a useful summary of initiatives current nationally and at state/territory level (though some of these may by now have been superseded)

Among others, Schueler (1999) notes that older people tended to focus on skills rather than on qualifications; many preferred a modular form of training that would fill specific gaps in their knowledge. Schueler suggests, as might be expected, that the top motivation for mature-aged people was gaining extra job skills, followed by gaining employment (or self-employment), and then by interest and personal development.

Another important report (Business Work and Ageing Swinburne University of Technology, 2004) examines the transitions involved in training and employment for older workers who are disadvantaged. It uses the metaphor of a journey to examine the following questions:

1. Could adult and community education, vocational education and training and the Job Network improve the promotion of formal education and training to this age group, and their engagement with learning?
2. What are the key factors associated with the successful entry of older workers into formal education and training, their participation in it, and their transition to employment?
3. Are there ways in which the linkages between ACE, VET, the Job Network and local employers can be improved to increase participation in education and training and improve transitions?

4. What are the characteristics of good marketing, teaching and other system practices leading to successful outcomes in learning and moving into employment for this group? How are they implemented in practice?

The report discusses factors that assist the successful entry of mature-age workers into education and on into employment. It comments on aspects of training organisations as well as employment and workplace issues.

It is important to remember that mature age people form a large and diverse group. Some of those who come in to VET for training may have painful memories of unsatisfactory early education, while others may come to VET for specific training after a long history of participation in education. It is important to note both barriers and opportunities. For example, Wooden, VandenHeuvel, & Cully (2001) note that:

The more educated the older person, the less likely are they to need encouragement or an incentive to undertake further training. More educated older persons are more likely to increase their participation in training if barriers such as providing adequate information about available training together with ease of access and convenience are addressed. However, for the vast majority of the older age cohorts, the barriers to training are likely to be more fundamental.

The barriers suggested by Wooden et al. include:

- the absence of paid work;
- a decline with age in the capacity to learn;
- particular education and occupational characteristics, such as low level of education attainment and concentration in low skilled jobs, of the current older age cohort (the cohort effect);
- a public policy environment that has encouraged early retirement from age 55;
- discrimination by employers on the basis of the assumed work attitudes of older employers; and
- older persons' self-perceptions about the lack of value in undertaking further training.

These findings are echoed in Thomson, Dawe, Anlezark, & Bowman (2005), who found that:

Through a systematic review of existing research, evidence has been found that skill development activities lead to improved labour market outcomes for some mature-aged people (in terms of higher employment rates or wages), especially for those who were previously unemployed, and for women.

Evidence has been found that labour-market-related gains are greater for the mature-aged who complete higher-level qualifications. Gaining lower-level qualifications or incomplete qualifications may have a negative effect on labour-market-related gains for some older people.

Particular sub-groups have their own characteristics. For example, most men in rural areas have a preference for informal, practical, group settings, and prefer to learn in settings that are familiar to them (perhaps, but not necessarily, their workplaces) (Golding, Harvey, & Echter, 2004).

A study of another specific group, retrenched workers in the textile, clothing and footwear industry, is particularly useful because of the parallels that can be drawn with other groups of older people seeking re-employment. The report (Keating & Robb, 2005) demonstrates the problems of people over 45 who have low literacy or low skills in English. These problems may debar them from jobs they are well capable of doing, and also discourage them from seeking training. Added to this, as the same report (along with others) notes, is the attitude of some employers who are reluctant to employ older

people. According to another report prepared by Mission Australia, 'older workers are still more likely than other unemployed people to experience lengthy periods of unemployment and marginal labour force attachment' (Mission Australia, 2000).

One summary of characteristics of the unemployed in relation to training is constructed by Walsh & Skippington (2005) as follows:

- Often major barriers to training are present, including difficulties with literacy, numeracy and information technology
- The unemployed desire a safe, non-threatening environment
- There are many costs which affect their ability to attend training such as travel and child minding, so making it accessible is important
- In considering flexible options, the scheduling of courses may not be as much of an issue but location may be a concern
- The learner may need more up-front guidance and support
- The learner may require other generic skills development e.g. communication, self-esteem and working autonomously
- Study skills or preparatory courses may be necessary
- Quite often the unemployed mature aged worker is disadvantaged and there may be health problems which affect their capabilities
- These learners seem to favour face to face methods of delivery, at least until they become acquainted with the learning environment
- Self esteem and motivation are important factors and the learner may require additional support to ensure these attributes are maintained
- The learner generally requires more clearly defined goals
- The unemployed mature aged learner can find assessment threatening because of lack of experience or low self esteem.

Relevant aspects of e-learning

This section deals with a small quantity of the research on e-learning which may be helpful to the current project, though it does not necessarily refer specifically to mature-age learners.

Firmin & Miller (2005), in scanning recent research, found that the following characteristics of successful and satisfied online learners in higher education included:

- Self-motivation
- Lack of procrastination
- Good reading and comprehension skills
- Resistance to distractions
- A level of comfort with social situations
- A preparedness to interact with peers through online means.

While VET students may not share all the characteristics of higher education students, the attributes listed above are not inconsistent with those found in studies based in VET.

A UK report which looks at the impact of e-learning on student outcomes (Finlayson, Maxwell, Caillau, & Tomalin, 2006) suggests four critical conditions for the effective use of online technologies:

- Equipment: availability of adequate ILT [information and learning technology] equipment;

- Tutors' intentions and teaching skills: deploying ILT purposefully within a teaching approach based on sound pedagogic understanding and practice;
- Tutors' awareness: of how to use ILT to support learning and teaching in their subject and the range of resources that are available to support this;
- Time allocated: to tutors for individually and collaboratively developing their ILT practices.
- Influence of contextual factors.

The case study colleges were at different stages in implementing ILT. ILT use was most effective in colleges where the main focus of the ILT vision was on integrating ILT within learning and teaching. This in turn influenced priorities for the structural organisation of ILT, workforce development, equipment purchase, and expectations placed on tutors. Colleges at earlier stages of development tended to focus on the management of learning, which had less impact on student outcomes.

An Australian study commissioned by NCVET to look at learners' views about online learning (Cashion & Palmieri, 2002) proposed eleven critical factors for quality in online learning:

- Flexibility
- Responsive teachers
- Quality of materials and course design
- Access to resources
- Online assessment and feedback
- Increase in IT skills
- Learning style
- Interaction with other students
- Communication
- Ease of use
- Hybrid mix of face to face and on-line learning.

These factors were the result of consultations with students, and were similar (though not identical) to those resulting from consultations with teachers.

Activities of the Australian Flexible Learning Framework

The Inclusive e-Learning Project is one of 14 Australian Flexible Learning Framework projects. The Project aims to help young people, mature age workers and people with disabilities to learn more flexibly, and to improve their employment-related training opportunities. Research conducted through 2005-06 by the project found that the major issues for these groups of learners were engagement, participation, completion and employment outcomes.

The work done by other Framework funded projects has also created knowledge that would be useful to practitioners considering the e-learning needs of mature age workers. Examples are New Practices in Flexible Learning and its innovative work on the use of voice technologies, and the Community Engagement Project whose regional e-learning communities enhance adult learning and literacy and numeracy outcomes.

Other initiatives, though they may not specifically identify mature learners as a target group, have relevance to the current project. E-Standards in Training, for example, focuses on a national infrastructure for managing electronic learning resources in the training system. Its aim in doing this is to provide an environment that is more predictable, safer, efficient and dependable. These qualities link to the needs of mature

age learners, in fact all learners, when they encounter an online learning environment or e-learning resources.

Readers are referred to the Australian Flexible Learning Framework website, <http://www.flexiblelearning.net.au/flx/go> , for further projects.

For more information on the Australian Flexible Learning Framework:

Phone: (07) 3307 4700

Fax: (07) 3259 4371

Email: enquiries@flexiblelearning.net.au

Website: flexiblelearning.net.au

GPO Box 1326

Brisbane QLD 4001

Websites

The following section includes details of government and other websites of relevance to the current project. The information has been extracted verbatim from the URLs cited, and is self-explanatory.

<http://portals.dewr.gov.au/toolboxes/mature.htm>

Department of Employment and Workplace Relations (Commonwealth)

Welcome to the Mature Age Employment Services Toolbox

Mature age workers have a lot to offer Australian businesses and communities due to their experience, skills and knowledge. However, when viewing opportunities for re-employment it is important to note employer biases and perceptions which can stand in the way, creating barriers for mature job seekers to gain meaningful re-employment.

Job Network and other employment service providers are in a central position to influence and change the attitudes of employers. With a high percentage of current job seekers falling into the category of mature job seekers, it is in the interest of each employment service provider to develop innovative strategies to help overcome barriers to their re-employment.

This toolbox has been designed to highlight the necessary tools for Job Network members to aide and support mature job seekers in their search for employment. You will find a range of Guides which discuss relevant issues specific to mature job seekers, which contain facts and figures, case studies and exercises to help you and your office develop strategies at a local level which will help mature age Australians into work.

Terminology

For the purposes of this site the term mature age has been used to mean persons aged 45 years and older.

Printing the Mature Employment Services Toolbox

To print the entire Mature Employment Services Toolbox, including all guides, exercises, case studies and links, please download the easy print PDF below. To print individual pages please find the 'print this page' icon situated at the bottom left hand corner of all pages.

<https://ecsn.gov.au/jobwise/default.aspx>

Jobwise (Commonwealth)

Jobwise is a web site dedicated to promoting mature age employment. The web site contains information for employers, mature age job seekers and mature age workers.

The site is managed by the Labour Market Strategies Group of the Australian Government Department of Employment and Workplace Relations.

The Jobwise web site has been developed as part of the Australian Government's Mature Age Employment and Workplace Strategy (MAEWS). The MAEWS seeks to improve the labour force participation of mature age Australians as a key strategy for managing the impact of demographic change.

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Age Management Training

Age Management Training (AMT) will help employers meet the challenges of Australia's ageing workforce and assist experienced workers plan and implement a phased retirement.

Separate training courses have been developed for managers/team leaders and experienced workers/job seekers:

- The Team Leader workshop is designed to provide line managers with practical solutions to implement age positive workplace practices to help them attract and retain experienced workers and maintain an age balanced workforce.
- The Experienced Worker workshop provides experienced workers, mature age job seekers and retirees with practical help to review their work/life goals, plan their retirement, and work with their employers to make best use of their knowledge and experience.

We have recently announced that the Australian Institute of Management (AIM) will be delivering training sessions to assist trainers deliver AMT to their clients. 20 sessions will be held around Australia early in 2007, including all capital cities and selected regional towns.

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

Skills for the Future

If you're thinking about your future, you can find information on Australian Apprenticeships, Australian Technical Colleges, the Career Advice Australian network, and the new Skills for the Future package, to help mature age Australians start and upgrade their qualifications

<http://www.nationalseniors.com.au/>

National Seniors

National Seniors Association Ltd. (National Seniors) was formed in 1991 from the merger of Mature Australia of New South Wales and Later Years of Queensland and a further merger with Self Funded Retirees of Western Australia. National Seniors is a not-for-profit membership based community organisation which has as its major objectives:

- To provide economic and social benefits for people 50 years and over;
- Represent its members views to Government at all levels;
- To make donations and provide service and advice to charitable institutions assisting people 50 years and over.

With a membership of 280,000 and growing National Seniors is Australia's largest organisation representing those aged 50 years and over. Our membership is divided between those in the workforce, those on social security pensions and self funded retirees.

With [branches Australia-wide](#), and an [online branch](#) our members have the opportunity to have their say on issues that affect the over fifties.

National Seniors actively presents the views of its members to all levels of government and is represented on numerous consultative committees

<http://www.communities.qld.gov.au/seniors/>

Department of Communities (Queensland)

[Information for Queensland Seniors](#)

This publication provides an overview of the programs and services provided by the Department of Communities for Queensland seniors.

[Seniors Card](#)

Read all about Seniors Card including how to join, apply for a card, replace a card, change card details, upgrade a card and cancel a card.

[Seniors Week](#)

Celebrate Seniors Week 19 to 27 August 2006 through community activities such as Sunday Funday, Seniors Card Expo and Spectacular and other sponsored events.

[Premier's Award for Queensland Seniors](#)

Through the annual Premier's Awards for Queensland Seniors, the Department recognises the key role many older people play in the community and their voluntary contributions to the quality of life in Queensland.

[Cross Government Project to Reduce Social Isolation of Older People](#)

A cross government project to identify leading practice models in the reduction of social isolation of older people in Queensland.

Older People Speak Out Media Awards 2005

This cross government project within the Department of Communities aims to identify leading practice models in the reduction of social isolation of older people in Queensland.

Queensland Seniors Council

The council provides current and timely advice to the Minister for Communities, Disability Services and Seniors and the Queensland Government on issues relating to seniors and ageing.

Young at Art competition

By participating in the Young at Art competition, young people can better appreciate the experiences of seniors and their contributions to society.

Publications and resources

Provides a range of publications for Queensland seniors including Important Information for Queensland Seniors, Ageing Myth and Reality and Our Shared Future: Queensland's Framework for Ageing 2000-2004.

<http://www.cas.flinders.edu.au/sanra/>

SANRA is the South Australian Network for Research on Ageing

To learn more about SANRA visit the About SANRA page.

On this web site:

- The SANRA Research Directory (2000), a detailed list of current research projects relating to ageing in South Australia. You can search the Directory for key words and authors or browse the entire document.
- Back copies of Network News, SANRA's quarterly newsletter.
- Fact Sheets containing information about issues relating to South Australia's ageing population.
- Read papers from the SANRA Occasional Paper series.
- Awards. Find out more about the annual SANRA Research Awards.
- Education. Visit this page to find out about courses offered in South Australia.
- A list of Reports including Occasional Papers, Seminar Papers, Workshop Reports and the SANRA Research Directory.
- Links. Visit other sites on ageing research.

<http://www3.griffith.edu.au/03/u3a/>

U3A Online (provides links to U3A branches throughout Australia)

U3A Online offers short courses covering a range of interests for older people who want to study online, and many other useful resources.

Courses

U3A Online is a world-first virtual University of the Third Age delivering online learning via the Internet. All that's needed to study online is access to a computer with an Internet connection - and some basic computing skills.

Our courses are open to all older people anywhere in the world. They are especially suited to older members of the community who are isolated either geographically, or through physical or social circumstances (including carers).

Resources

The U3A Online website provides up-to-date contacts for all Australian and New Zealand U3As as well as facilities for their members to exchange ideas, resources and information about regional U3A events. The wide range of helpful information, including news items and links to many interesting websites, will also prove useful to other groups of older people.

<http://www.ala.asn.au/>

Adult Learning Australia

Adult Learning Australia (ALA) is the national peak body representing organisations and individuals in the adult learning field.

We are a not-for-profit entity with both organizational and individual members in all States and Territories who reflect the extraordinary diversity of adult and community learning. They include adult educators in universities, TAFE Colleges, Community Houses and adult community education providers (ACE), as well as community workers, librarians, individual tutors and trainers, volunteers and students.

ALA also has input to the MCEETYA Taskforce and the Australian Quality Framework Advisory Board (AQFAB).

The national office is based in Canberra.

ALA is primarily funded (as of 1ST July 2005) by a grant from the Department of Education Science and Training (DEST), membership dues, subscriptions and project revenues.

In 2006, we celebrate our 46th year as a contributor to the adult learning debate in Australia and the 11th anniversary of Adult Learners' Week celebrations.

An immediate objective is to extend our reach to workplaces in both the government and the business communities, as well as to advance awareness of the contribution to social, human and identity capital made by lifelong learning and the way these values interact and contribute to community and organisational learning.

Linked with this, ALA also has a strong interest in the contribution learning makes to active ageing in the community, and particularly where focused high quality research can positively support the retention of an ageing workforce as well as contribute to the quality of an ageing lifestyle

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

DOME South Australia

DOME (Don't Overlook Mature Expertise) (South Australia)

DOME's primary function is to assist mature people (members) aged 40 and over into employment situations.

New members register with DOME and provide their work experience, qualifications and employment references.

A feature of DOME is its 'pro-active' approach to employment solutions. Members are 'job matched' to vacancies and then recommended to employers.

DOME membership has increased to approximately 3,000 people, notwithstanding that some 20,000 members have returned to the work force over the years.

Information regarding incentive & training programs for mature aged unemployed and employers, can be obtained by contacting the DOME office.

DOME provides a range of services to members including:

- Job search training
- Workplace entry/re-entry
- Computer training
- Volunteering

<http://www.domewa.com.au/>

DOME Employment Services (Depend on Mature Expertise) (WA)

DOME has evolved into a specialist advisory and placement service filling an employer and mature age jobseeker niche market. As a specialist service in Perth, Western Australia, it has achieved its reputation through the provision of personalised, quality services by meeting the specialised requirements of business and industry.

The provision of relevant services to the mature age (40+) jobseeker is the primary goal of this organisation. DOME has demonstrated its capacity to achieve significant employment outcomes for clients. These results have been achieved through diversifying marketing strategies, offering quality placement services to business and working with clients to achieve individual personal goals and objectives.

DOME prides itself on a high level of self referral, networked referrals and the very best advertisement "through friends, colleagues or relatives who have previously received quality services from your organisation".

DOME sees itself in a partnership role with mature age clients encouraging them in the acquisition of a range of employment sources which supplements the focus on the full time position. In-house workshops offer a range of opportunities for diversified thinking to facilitate a higher success rate in obtaining work. Self marketing, negotiation and attention to the necessary tools to win new work is a major component for successful employment participation.

DOME currently employs eight permanent and contract staff from a range of industry backgrounds and is responsible to a Board of Management representing business and government interests.

DOME Training Services is a Registered Training Organisation that offers unique [computer training](#) services consisting of small classes (no more than six participants in a class) with a fully qualified trainer in both Microsoft modules together with Foundation and Advanced MYOB Courses.

References

- Baldwin, T. (2002). *Setting directions for training mature aged and older unemployed people in VET*. Melbourne: Office of Employment, Training & Tertiary Education.
- Cashion, J., & Palmieri, P. (2002). *'The secret is the teacher': the learner's view of online learning*. Adelaide: NCVET.
- Business Work and Ageing Swinburne University of Technology. (2004). *Furthering success: education, training and employment transitions for disadvantaged older workers*. Canberra: Department of Education, Science and Training.
- Finlayson, H., Maxwell, B., Caillau, I., & Tomalin, J. (2006). *E-learning in further education: the impact on student intermediate and end-point outcomes*. Sheffield: Sheffield Hallam University School of Education.
- Firmin, S., & Miller, C. (2005). *Facilitating the development of lifelong learners through e-communication tools*. Paper presented at the ASCILITE, Brisbane.
- Gelade, S., Catts, R., & Gerber, R. (2003). *Securing success: good practice in training people aged 45 and over who are disadvantaged in the labour market*. Armidale, NSW: The Workplace Education Research Consortium, University of New England, for the Australian Government Department of Education, Science and Training.
- Golding, B., Harvey, J., & Echter, A. (2004, 14-16 September). *Men's learning in small rural towns: a Victorian survey*. Paper presented at the Australian Learning Communities Network Conference, Newcastle, NSW.
- Heaperman, S., & Sudweeks, F. (2001). *Achieving self-efficacy in the virtual learning environment*. Paper presented at the Australian Association for Research in Education (AARE) conference, Fremantle, WA.
<http://www.aare.edu.au/01pap/hea01715.htm>.
- Keating, M., & Robb, A. (2005). *What do I do next? Developing an integrated literacy strategy and model for retrenched workers in the Textile Clothing and Footwear industry*. Melbourne: Textile, Clothing & Footwear Industry Union on behalf of the Department of Education, Science & Training.
- Leigh, E. (2000). Getting online: process or product? In G. Hart (Ed.), *Readings and resources in global online education*. Melbourne: Whirligig.
- Meyers, W. (2006). *Equity issues in ICT in higher education: the experience of mature-age rural women*. University of Wollongong, Wollongong.
- Mission Australia. (2000). *Snapshot survey: older workers and the Job Network: submission to the Standing Committee on Employment, Education and Workplace Relations Inquiry into issues specific to older workers seeking employment, or establishing a business, following unemployment*.
- NCVER (2006). *Australian vocational education and training statistics: Students and courses 2005 – Summary*. Adelaide: NCVET
- Quinton, S. R., Dreher, H., Fisher, D., & Houghton, P. (2005). *Harnessing technology to empower mature age learners*. Paper presented at the 4th International Conference on Science, Mathematics and Technology Education, Victoria, Canada.

- Schiller, J. (2003). *Building online communities: the lecturer's role in facilitating interaction among non-computer oriented, mature-age adult learners*. Paper presented at the ASCILITE conference, University of Adelaide.
<http://www.ascilite.org.au/conferences/adelaide03/docs/pdf/691.pdf>.
- Schueler, J. (1999). Older people in VET. In A. Smith (Ed.), *Creating a future: training learning and the older person*. Adelaide: NCVET.
- Taylor, T., & Rose, J. (2005). *Bridging the divide: older learners and new technologies*
- Thomson, P., Dawe, S., Anlezark, A., & Bowman, K. (2005). *The mature aged and skills development activities: a systematic review of research*. Adelaide: NCVET.
- Walsh, T., & Skippington, K. (2005). *Mature aged learner research project: consultancy report for Open Learning Institute and Centre for Innovation and Development*. Brisbane: TAFE Queensland.
- Wooden, M., VandenHeuvel, A., & Cully, M. (2001). *Barriers to training for older workers and possible policy solutions*. Flinders University, Adelaide: DETYA/NILS.