Final Report

“Making the Connections: Non-metropolitan Older People and Technology”

An event for International Year of Older Persons 1999
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by

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Acknowledgements

Making the Connections would not have been possible without the assistance of a range of organisations and individuals. There are many people and organisations to thank and some are sure to be inadvertently overlooked, to these people I apologise in advance.

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Ros Foskey
Project Director

4 July 2000
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EXECUTIVE SUMMARY

BACKGROUND

In 1999, The Rural Development Centre at the University of New England, Australia received an International Year of Older Persons grant from the Australian Commonwealth Department of Health and Aged Care. The grant was provided to assist with the development and co-ordination of a national event, Making the Connections: Non-metropolitan Older People and Technology. The project concept grew from previous work of researchers at The Rural Development Centre. The Centre is involved with research related to the sources of, and responses to change affecting non-metropolitan Australia.

Aims

The aims of the Making the Connections project were:

1. To provide a forum for people from a range of backgrounds involved with the issues and research in relation to older people and technology.

2. To actively involve people from non-metropolitan areas in the project, particularly those who tend to be marginalised and isolated.

3. To examine the issues for non-metropolitan older people in the increasing reliance on new forms of technologies to access a range of goods and services.

Activities

Making the Connections consisted of three separate activities, an online conference run for seven weeks from 7 September to 22 October 1999, a one-day workshop using video-conference on 13 October 1999, and a two-day conference at the University of New England on 19 and 20 November 1999.

MAJOR ISSUES

1. **General Technology Issues**

   - Older people in non-metropolitan Australia lack access to appropriate education and training to assist in ‘demystifying’ technology.

   - Design of technology is failing to take into consideration the needs of people across the life cycle, including later life.

   - Established universal access standards are not always being effectively applied in practice.

   - Designers and manufacturers are tending to ignore the potential market among older people.

   - Technology designers and manufacturers need to develop more effective consultation mechanisms with older people.
• Many technology retailers and services are failing to provide a ‘seniors friendly’ service.

• There is a need for a system of evaluation for technology product design on the suitability for use across the life cycle, similar to the system used to rate appliances for energy efficiency.

• Language is presenting an additional barrier to the use of technology by older people with difficult to understand equipment manuals/user guides, and the unnecessary use of jargon by manufacturers, information services, retail staff and service personnel.

2. **The Telephone**

• Older people in non-metropolitan Australia are increasingly reliant on the telephone to access a range of goods and services no longer available at a local level.

• There are problems with the quality and reliability of telephone services in non-metropolitan Australia.

• New forms of telephone services (regionalised services, automated systems, call centres) have been introduced with insufficient evaluation of the potential impact on the well being of older people in non-metropolitan Australia.

• There has been a failure to ensure that older people have access, support and education on the use of telephone technology. In particular education that takes into consideration those older people with special needs because of limited literacy, disability and/or health problems.

• Increasing numbers of the telephone calls being made by people living outside capital cities and regional centres need to be made at long distance call rates, presenting a significant access barrier for older people on low incomes.

• One consequence of the regionalisation and centralisation of services and reliance on telephone-based access can be to undermine the independence of older people as they turn to relatives, friends, or community services to assist in making telephone calls to these services.

• Telstra has failed to ensure that all older people in non-metropolitan Australia have access to a telephone capable of being used for automated telephone services.

• Telstra has failed to ensure that all older people in non-metropolitan Australia are aware of services available for people with special needs and disabilities.

• There are potential benefits arising from mobile telephone technology as one option to improve safety and security for older people, particularly for people who live outside urban centres. However, there are also barriers to increased adoption of this technology by non-metropolitan older people. These barriers include the cost of equipment, connection and calls; design issues (size, keypad and hearing aid compatibility), and limited mobile phone coverage in many areas outside larger urban centres and major highway routes.

3. **Computers and Online Technology**

• A number of electronic business and Government services have design and implementation problems, which are impacting on the level of uptake by non-metropolitan older people.

• The design, placement and reliance on automatic teller machines was a particular concern for the participants in *Making the Connections*.
• Online services should be a means of enhancing services, not viewed by business and Government as a replacement for face-to-face services.

• Many older people in non-metropolitan Australia are interested in learning about and using computer technology, however, Making the Connections participants also identified a need to improve access to awareness and education programs that respond to the particular needs of older learners in non-metropolitan Australia.

• Initiatives are required to extend public access options to the Internet, appropriate to the needs of older people in non-metropolitan Australia. This is essential to prevent the further marginalisation of older people in non-metropolitan Australia on low incomes, with a disability, health problems and/or other special needs.

• There can be benefits for the quality of life and well being of non-metropolitan older people from access to online technology particularly initiatives that enable isolated and housebound older people to maintain social contact, and to participate in interest groups and/or learning opportunities.

**RECOMMENDATIONS**

1. That the Commonwealth Government sponsor a National Award to recognise excellence in trans-generational design – i.e. products designed to meet the needs of people across the life cycle.

2. That Government and the corporate sector combine to provide funding and in-kind support for the extension of technology education programs for older people living in non-metropolitan Australia. Such initiatives should include particular consideration of the learning and equipment needs of older people with limited literacy, disability, ill health and/or other special needs.

3. Seed funding be made available by Government to encourage the development of strategic partnerships between seniors’ organisations, consumers’ organisations, industry and Government bodies to develop product and service accreditation schemes to ensure that technology design, manufacture, retail and services better meet the needs of people across the life cycle.

4. That program guidelines for technology initiatives in non-metropolitan Australia (e.g. provided under the Networking the Nation Program) be reviewed to ensure an improved understanding of the importance of older people as a specific target group in non-metropolitan Australia.

5. That Government departments, and the corporate sector using technology to deliver consumer services (e.g. automated telephone systems, internet based services, electronic business services), provide awareness and education programs for their staff on the needs of older people, particularly older people living in non-metropolitan areas where face-to-face alternatives may be difficult to access. This training program should include staff that are responsible for the policy development and implementation of technology ‘solutions’, in addition to staff involved in the design of technology service systems.

6. That Government and the corporate sector responsible for the design and implementation of technology systems develop improved consultation mechanisms with non-metropolitan older people.
7. That Government and the corporate sector sponsor programs to encourage the development of innovative and creative access options, including public access points, targeted specifically at non-metropolitan older people who would otherwise be excluded from access to new forms of information and communications technology.

8. That appropriate national and international forums be used to encourage designers, manufacturers and service providers to better integrate universal or trans-generational principles into their products.

9. That in regional Australia call zones for local calls be extended to include all areas within the catchment area of a regional centre.

10. That the delivery of Universal Service Obligations be improved to ensure equitable service delivery to people living in all areas of Australia. The Commonwealth Government should require an improvement in the delivery of information about services for people with special needs (under Universal Service Obligations). This improvement should include the improved integration of disability services within mainstream marketing and promotion programs, as well as a pro-active approach to the promotion of these services to people living in non-metropolitan Australia.

CONCLUSION

The Making the Connections project has successfully involved older people from across non-metropolitan Australia. It has been innovative for the way in which technology has been used as an integral part of the project, which has shown the potential for increased use of technology in consulting with older people living outside capital cities and major regional centres.

Older people and others interested in the implications for those living in non-metropolitan Australia of an increasing reliance on technology can move beyond identifying the issues to identifying solutions to these problems. Government has a crucial role in ensuring that the interest and commitment of those older Australians who participated in this project are rewarded through the provision of the necessary resources for positive change to occur. The point was made that such a commitment has to move beyond the current tendency towards tokenism.

The question asked was ‘Does the Federal Government want people out here at all?’ The group felt that Bronwyn Bishop’s [Commonwealth Minister for Aged Care] two initiatives—education about banking (has not been sighted here) and the $60,000 for U3A ..were highly inadequate to say the least!

[Report of Charleville Group, Video-conference Workshop]

This project has identified the breadth of issues relating to the impact of technology on day-to-day life and which, over the next decade, are likely to have an increasing influence on the quality of life of older Australians particularly for those people living in non-metropolitan Australian. Yet it was also recognised and acknowledged by participants in Making the Connections that the need for action and change does not lay with Government alone. With technology being a global industry, improvements in design and implementation can only occur if pressure is placed on designers and manufacturers in both our own, and other countries using appropriate international forums.

However, the relevant Ministers and Departments at State and Commonwealth levels, responsible for policy and practice development in relation to ageing do have a crucial role in ensuring an inclusive technology environment for Australia’s older residents. This includes the development of improved cross-departmental consultation and collaboration at all levels of Government to guarantee that technology related policies and practice cover consideration of the particular needs of older people, including particular consideration of those living in non-metropolitan areas.
This project proved timely with the Commonwealth Government requesting the Human Rights and Equal Opportunity Commission (HEROC) to undertake an Inquiry into Access to electronic commerce and new information and service technologies for older Australians and people with a disability. The Making the Connections project has been used by HEROC as one source for the Inquiry. The Secretary of the Inquiry took part in the video-conference and was the ‘guest speaker’ on one chat session. A link to the Making the Connections web site was included in the online resources of the Inquiry. However, it is important to note that the discussions of Making the Connections have canvassed a much broader range of technology-related issues than the HEROC Inquiry, which was confined by its terms, to electronic commerce, new service and information technologies.

Making the Connections has already had some tangible outcomes in improved liaison and collaboration between key technology initiatives from across Australia through the development of the Education, Ageing and Technology (EAT) Network. The EAT-Network listserver established in December 1999 and currently managed by The Rural Development Centre is playing a vital role in providing a venue for the exchange of information and ideas. However, this virtual network needs seed funding to enable it to more effectively fulfil the plans made at the Making the Connections conference. The listserver is also assisting to identify people in a range of disciplines undertaking research in the area of older people and technology (many of whom are ‘older’ themselves). It is important that such researchers are given appropriate opportunities to diffuse their findings. The Making the Connections conference was an important first step, but needs to be followed by similar events, perhaps on a biennial basis. Just as with Making the Connections future events need to integrate the use of online technology to increase the opportunities for active participation by older people from across Australia.
1. BACKGROUND

In April 1999, The Rural Development Centre at the University of New England received a grant from the Commonwealth Department of Health and Aged Care to assist with the development and co-ordination of an event for the International Year of Older Persons, Making the Connections: Non-metropolitan older people and technology. As well as providing a forum for the sharing of information and for the discussion of issues in relation to technology, the project also made use of online technology to broaden the opportunities for people from across Australia to participate.

2. SPONSORSHIP

The project had a number of sources of sponsorship. These were:

- **Commonwealth Department of Health and Aged Care**
  Sponsorship of the event with a grant of $20,000

- **International Council for Canadian Studies**
  Grant of $5000 to enable the involvement of the Seniors Education Centre, University of Regina, Saskatchewan, Canada in the Making the Connections event including a visit to Australia by Dr Don King, Director, as keynote speaker for the November conference.

- **National Office of the Information Economy**
  Grant of $2500 for the design and technical management of the chat sessions held as part of the online conference.

- **The University of New England**
  The University of New England provided substantial support for the event through various University departments including The Rural Development Centre; School of Mathematics and Computer Sciences; Teaching and Learning Centre; University Conference Company; University Motor Pool; Faculty of Education, Health and Professional Studies; University of New England Student Union and Campus Travel Centre.

- **Community Organisations**
  Participation at the selected sites for the video-conference was made possible by the cooperation and assistance of organisations in each selected community. These organisations included:
  - Teaching and Learning Centre, University of New England and Armidale Council, Armidale.
  - Tumby Bay Community Development and Telecentre.
  - Longermong College and Wimmera Development Board, Horsham.
3. AIMS

The aims of the *Making the Connections* project were:

1. To provide a forum for people from a range of backgrounds involved with the issues and research in relation to older people and technology.

2. To actively involve people from non-metropolitan areas in the project, particularly those who tend to be marginalised and isolated.

3. To examine the issues for non-metropolitan older people in the increasing reliance on new forms of technologies to access a range of goods and services.

4. ACTIVITIES OF THE PROJECT

*Making the Connections* consisted of three separate activities, an online conference run for seven weeks, a one-day workshop using video-conference, and a two-day conference at the University of New England.

4.1 Online Conference

The online conference (at [www.mtc.une.edu.au](http://www.mtc.une.edu.au)) was launched with a live chat session as part of *Seniors Online Day* on 7 September 1999. The Minister for Aged Care, The Hon. Bronwyn Bishop MP, and Patron of *Seniors Online Day*, Dawn Fraser, were special guests on the first session. The online conference was run for a total of seven weeks until 22 October 1999. The Home Page for the Conference had over 950 visitors from the time the counter was activated on 31 August 1999. A total of 289 individuals registered from across Australia to participate in the online conference, and at a number of venues more than one person took part from a single access point (i.e. a single registration actually represented multiple participants).

Almost half of the registered participants were older people (i.e. 55 years and over). Sixty-one per cent of the participants came from non-metropolitan areas and, of these, approximately half were from regional centres. The remaining participants were from small rural and remote communities and non-urban areas. Over one-third of the participants logged in from their home. Other sites used were libraries, workplace, community organisation, community online centre/telecentre, and university, and small numbers of participants logged in from TAFE, school, and home of a friend or relative. (See Attachment 1).

A variety of mechanisms were used for promotion of the conference. These included distribution of information about the online conference on a variety of listservers, inclusion of information in journals and newsletters, media interviews and distribution of fliers (including one to all Seniors Card holders in the Northern Territory). The Online Australia, *Seniors Online* web site had a link to the *Making the Connections* site. The Human Rights and Equal Opportunity Commission was conducting an inquiry on the implications for e-commerce for older people and also included a link from their web site to the *Making the Connections* site.
The online conference included two options for participation. The first was a forum divided into three topic areas—general technology issues, telephone, and online technology. People could contribute to these forums at any time during the period 7 September to 22 October 1999. Participants in the forums came from across Australia and also included Dr King (keynote speaker for the November conference) from the Seniors Education Centre, Canada. A total of seventeen people actively participated in the forum discussions across the seven weeks.

In addition a series of chat sessions were sponsored by Online Australia as part of their Seniors Online initiative. The chat sessions were held once a week during the period of the online conference. Each chat session featured a ‘guest speaker’ selected for an interest and involvement in the area of older people and technology. The chat sessions proved to be the more popular means of participation and attracted participants from across Australia. The highest number of connections for a single chat session was thirty-two. However, many single connections actually represented multiple participants in the chat, as people came together in various venues at a single access point.

There were some technical problems related to a ‘denial of service attack’ on the University of New England system which led to the cancellation of one chat session and affected the quality of connections to the University for a period of two weeks during the online conference.

4.2 Video-conference Workshop

On 13 October 1999 a one-day workshop Technology—Meeting the needs of older people in rural areas? was held in six sites in selected small to medium sized rural communities. A total of eight sites were linked by video-conference during the day from the base at the University of New England, Armidale. The sites were located in five states, Tasmania, South Australia, Victoria, New South Wales and Queensland. Unfortunately the Northern Territory and Western Australia were not able to be included as no suitable video-conference facility in a small to medium sized rural community could be identified in the Northern Territory, and the three hour time difference across Australia meant the inclusion of a West Australian site was not possible for a one day event. (See Attachment 2 for location of the sites).

Each participating community was required to recruit participants, cover all the local end costs associated with hosting the event (e.g. catering) and to provide a facilitator for the day. Funding from the Commonwealth Department of Health and Aged Care covered the cost of the video-conference connections. The day was co-ordinated by Ros Foskey overall Project Director, with the assistance of the UNE Video-conference Manager, Ian Truswell. The sites were linked three times during the workshop with off-line discussion at each site occurring between each of the links. Each link lasted for a total of one hour. Participant numbers at each site varied from two people (Cherbourg) to twenty people (Armidale). The sites were:

- **University of New England, Armidale, New South Wales.** Participants at Armidale came from a range of organisations in the local area as well as from the surrounding communities of Guyra, Glen Innes, Torrington and Walcha. The facilitator at Armidale was Mary Devine, Community Worker (Aged and Disability Services) with Armidale Council. The overall workshop co-ordinator, Ros Foskey of The Rural Development Centre, was located at the Armidale site.

- **Longernong College, Horsham, Victoria.** Participants at Horsham were members of the local branch of the University of the Third Age. The majority of Horsham participants had taken part in a computer training program undertaken in liaison with Wimmera Development Association. The facilitator at Horsham was Jo Bourke of Wimmera Development Association.

- **Tumby Bay Telecentre, Tumby Bay, South Australia.** Participants at Tumby Bay came through a range of organisations in the local area. The facilitator at Tumby Bay was Janene Piip, the Telecentre Co-ordinator.
Charleville and District Community Support Association, Charleville, Queensland.
Participants at Charleville came through a range of organisations in the local area. The facilitator at Charleville was Sue Jones, Project Officer with Charleville District Health Service.

Multi-purpose Health Centre, Flinders Island, Tasmania.
Participants at Flinders Island came through a range of organisations in the local area. The facilitator at Flinders Island was Judith Blundstone, co-ordinator of Flinders Island Online Access Centre.

Cherbourg TAFE, Cherbourg, Queensland.
The two participants at Cherbourg were associated with the local elders program.

Sydney University, Sydney, New South Wales.
The three keynote speakers/commentators for the day were based at Sydney University. The presenters were Nan Bosler, President Australian Seniors Computer Clubs Association and a member of the NSW Committee on Ageing; Teresa Corbin, Policy Officer Consumers Telecommunications Network and David Mason, Secretary ‘e-commerce and Older People’ Inquiry, Human Rights and Equal Opportunity Commission.

Parliament House, Canberra, Australian Capital Territory.
During the final link of the day the Minister for Aged Care, The Hon Bronwyn Bishop MP joined the discussion from Parliament House, Canberra.

The link-up of eight sites was made possible by the use of the video-conference bridge at the University of New England. This was the first time all eight sites on the bridge had been used since its installation earlier in 1999 in liaison with Northern Inland Online (and funded under the Networking the Nation Program).

4.3 Two-Day Conference

The final activity of the Making the Connections project was a two-day conference held at the University of New England on 19 and 20 November 1999. It had been planned to combine the Making the Connections conference with another technology conference, NatNet, planned for Armidale at the same time. Armidale Development Corporation had hosted a successful technology conference in 1998 and planned to make it an annual event. Unfortunately they did not obtain sufficient sponsorship for NatNet and decided to cancel it only a matter of weeks before the conference was due to occur. Despite the cancellation of NatNet, the Making the Connections conference was attended by fifty-three people from across Australia. (See Attachment 3).

Fliers about the conference were distributed through various networks, a total of 3500 were included in the mail-out. This included the newsletters of several organisations in NSW and Queensland. A range of mailing lists were targeted with the information including COTA, HACC services, libraries, local government, University of the Third Age (U3A) branches, Adult and Community Education (ACE) providers, and aged care services. Information about the project was distributed through regional networks in the New England region with specific targeting of the business and technology sector through organisations such as New England Information Technology Association (NEITA). In addition a number of listservers were used to distribute information on the conference. Despite this extensive promotion campaign the response from the technology and business sector at a regional level was disappointing. This reflects a general lack of understanding within the technology sector in non-metropolitan areas of the importance of older people as a large and growing ‘market’ for goods and services.

A high proportion of the presenters and participants at the conference were people over the age of 55 years. The conference participants included retired people, academics, workers within the aged care and HACC sector, information technology professionals, local government community workers, adult educators, disability sector professionals and representatives of various Government agencies
and departments. Participants included those already involved with specific technology initiatives at a local, regional, State and national level and older people who were interested in learning more about technology and its implications.

The program for the conference was designed to include a range of interests and to integrate sessions highlighting the needs and services for older people with disabilities. (See Attachment 4 for the Conference Program).

The two keynote speakers at the conference were:

- Dr Don King, Director, Seniors Education Centre, University of Regina, Canada. The Seniors Education Centre has been at the forefront of work in the area of older people and learning technologies in Canada and in the creation of a national network of third age learning organisations (Catalist). The visit to Australia for the conference at the University of New England by Dr King was made possible through a grant from the International Council for Canadian Studies.

- Professor Andrew Downing, Dean of Engineering, Flinders University. Professor Downing has been involved with a range of work in the area of older people and technology in South Australia including the development of Seniors-On-Line and a technology awareness program for older people Bridging the Technology Gap.

5. MAKING THE CONNECTIONS AS A TECHNOLOGY AWARENESS PROJECT

5.1 Online Conference

The online conference was an Online Australia event, and the National Office of the Information Economy provided funding for a series of chat sessions. The first chat session was part of the official opening events for Seniors Online Day held on 7 September 1999. The Minister for Aged Care, The Hon. Bronwyn Bishop MP, and Patron of the Seniors Online Day, Dawn Fraser, OAM, joined in a chat session with older people from across Australia. The participants were using a variety of venues including their own homes, public libraries, aged care services, public access venues, telecentres and adult education centres.

Adult Education Provider—We have 14 seniors here in the office ...a bit of a push to folk on the computers but all having fun I think!

Library—We have several senior going through the online tutorials.. we run courses for the ‘technologically terrified’...They are all most interested in this initiative.

For many of those taking part in the chat session this was their first experience of the Internet and chat. The more experienced hands on the sessions encouraged and guided them. Over the six chat sessions a number of participants became ‘regulars’ enjoying the opportunity to speak with people from across Australia. During the chat participants commented positively on the quality of interaction and the opportunity to speak with peers in comparison with more youth-oriented chat rooms.

5.2 Video-Conference Workshop

The majority of participants had never before taken part in a video-conference. Despite this lack of prior experience with the technology they quickly adapted to the unusual workshop environment. The technology itself worked well reflecting the extensive preparation undertaken by Ian Truswell,
the Video-conference Centre Manager at UNE, in ensuring that the variety of venues could be successfully linked together. It had originally been planned to include a link to Regina in Canada, however this was not possible because of technical compatibility difficulties. The Armidale participants were keen to understand how the technology worked and asked a range of questions of the Centre Manager during the workshop breaks.

The video-conference gave participants the opportunity to interact with people from other areas with whom they would not have normally come into contact. The participants commented on the way in which the technology had helped them to realise their commonalities, because of the overlapping concerns and issues between six rural communities, as highlighted by these comments from a participant and facilitator:

> It was a great conference yesterday and I guess it was not until after it was all over that I realised what a huge amount of time and effort you must have put in for it to go so smoothly. I am sure everyone would have been very pleased with the opportunity to talk ‘across Australia’. A very sincere thank you.

[Email Message from a Participant, Armidale site]

> Thank you for the opportunity. The group worked hard all day because they felt involved and motivated by being able to interact with people from so many places. I am sure we will see developments here as a result.

[Sue Jones, Facilitator, Charleville, Queensland]

The video-conference demonstrated the potential of this technology to provide policy makers with a cost-effective means of consulting with older people wherever they live in Australia. Major regional centres where older people tend to be provided with more opportunities to participate in community consultations were bypassed for the video-conference, in preference to smaller centres. However, the choice of sites was limited to those communities with access to suitable community-based video-conference facilities. Two of the sites originally selected and keen to take part could not participate—Blackall in Queensland, because their equipment required repair, and Dover in Tasmania as the Community Online Centre had been unable to afford to maintain their video-conference link.

5.3 Two-Day Conference

Making the Connections finished with a two-day conference at the University of New England and the participants were drawn from across Australia. A portion of the funding from the Commonwealth Office of Health and Aged Care was used to subsidise the participation of presenters from non-profit organisations. It was also used to pay the airfares for participants from Karatha in the Pilbara Region of Western Australia and Devonport in northern Tasmania because of their high travel costs to Armidale. This helped to ensure that the conference had national representation. The only area of Australia without a representative at the conference was the Northern Territory.

In regional Australia relatively high proportions of older people have disabilities, including vision and hearing impairments. It was for this reason that the conference program integrated presentations from representatives of disability organisations, and from researchers involved with initiatives to help improve the universal access.

The conference was an awareness-raising experience for the people attending from non-metropolitan Australia. It also played an important role in ensuring a greater understanding of rural ageing issues by metropolitan-based service providers. The conference was a networking opportunity as it was the first time many of those involved in seniors’ and disability technology initiatives had been brought together in the one place. This laid an important foundation for improved collaboration and cooperation which has since been built on with the establishment of the EAT-Network.
6. ISSUES IDENTIFIED

A number of key issues emerged in relation to technology and older people through the three activities (the seven-week online conference, the one-day video-conference-based mini-summit, and the two-day conference at the University of New England) held as part of Making the Connections. In addition to identifying issues and problems associated with technology, potential solutions were also identified by the participants. There was a substantial degree of agreement between participants in all three activities in the issues raised and suggestions for solutions. These issues and the suggested solutions have been divided into three topic areas: general technology issues, telephone, and online technology issues. More details on the issues and suggested solutions are provided in Attachments 5, 6 and 7.

The participants’ comments, which are interspersed throughout the discussion, are a sample taken from the discussions held as part of Making the Connections.

6.1 General Technology

Many older people (younger than me) have difficulty with many aspects of modern equipment. Bank instructions are impenetrable, user manuals are in Jinglish, and most salespeople only want to impress you with their brilliance. How do we tell them that if info is presented slowly and clearly, everyone could use and enjoy the stuff, instead of being put off by it.

[Chat Group Participant]

Contemporary Australia has an increasingly competitive and technologically challenging economic environment largely driven by global-market forces. This can disadvantage many older people, particularly those who live in non-metropolitan areas. Older consumers in regional, rural and remote Australia who took part in the discussion of Making the Connections felt that they are often marginalised by their distance from metropolitan areas and comparatively low population densities. The participants indicated that non-metropolitan older people are now being further disadvantaged by lack of access to information, awareness and education about technology.

The focus of discussions held as part of Making the Connections was not limited to information and communication technology, it covered a range of technology which older people in Australia use in their everyday lives. As a result, the participants raised a wide range of issues about the technology they use both within the home and elsewhere.

Making the Connections participants made the point that the latest versions of many common appliances including washing machines, VCRs, cooktops and ovens, can be difficult for many older consumers to use. The issues raised by Making the Connections participants included the lack of product standardisation, so that if a person learns to use a piece of equipment (e.g. washing machine, microwave oven, ATM, EFTPOS) that learning cannot always be transferred to another or updated model. Another issue raised by participants was that technology developments which improve the ease of use for one group of consumers, can create difficulties for another group of consumers. For example, touch and visual display systems may help people with arthritis but create problems for a person with a vision impairment. Equipment and appliances are tending to require increased levels of literacy competency on the part of the consumer because of complex information programming requirements, and inconsistent placement of information (e.g. on EFTPOS).

Manufacturers should ask older people to test equipment for design faults before mass production.

[Report of Flinders Island Group—Video-conference Workshop]

An important issue raised by participants in all the forums held as part of Making the Connections was the failure by designers, manufacturers and retailers to provide a ‘seniors friendly’ service to consumers. The tendency is for sales and service staff to use jargon, and for manufacturers to supply difficult to understand user guides, both of which were identified as significant barriers.
Sales people take it for granted that a purchaser understands their acronyms and their jargon. Usually for the purchaser there is so much to take in that the bulk of it gets lost. Most are unwilling to come back again—it takes time for a person to learn about the new operation. Perhaps there should be training for the salesmen—not so much about their goods—but in communication skills.

[Bulletin Board Participant]

Collectively, older people have spending power as consumers, since they are a growing proportion of the Australian population. Older people are therefore, potentially, in a position to be heard and heeded in the market place. However, to date, the needs of this market segment have tended to be largely ignored by technology designers, manufacturers and retailers as identified in a recent Australian study by Harding et al., (1999). This is the paradox, for the recognition of older people as an important segment of the technology market depends upon the empowerment of older people as consumers, which in turn requires older people who are better informed.

We are always being told we are an ageing population. Industry and agencies should be bending over backwards to cater to the needs of this growing market. Consultation with older people before manufacturers design their products.

[Report of Flinders Island Group—Video-conference Workshop]

Information and awareness initiatives to increase the understanding of technology among older consumers could be expected to have an influence on buying trends, the adoption and day-to-day use of technology by older people. In turn this would give the market edge to those designers, manufacturers and service providers that provide for use across the life cycle. Making the Connections participants made the point that there needs to be a range of innovative and wide-reaching initiatives for disseminating education and information to older people in non-metropolitan Australia. This would help to create more informed older consumers and give them increased confidence to question manufacturers and salespeople about product performance and quality. Suggestions for programs included the use of ‘roadshows’ to demystify technology and peer education initiatives, along with more creative use of the print and broadcast media. However, consumers are not the only target group identified as requiring training and education.

When people talk of training, they usually think of training end users to use the monsters created. How about training those that created systems how to consider disability and age when creating these systems.

[Chat Group Participant]

The point was made that designers, manufacturers and retailers also need training programs to ensure that technology was appropriate for use across the life cycle and for more seniors friendly service by retailers.

We need some National Awards for excellent trans-generational design.

[Chat Group Participant]

In order for effective change to occur, strategic partnerships need to be formed between seniors’ and consumers’organisations, industry, and Government bodies. Making the Connections participants pointed to a need for a rating system on which to judge products for universal or trans-generational design, similar to the star rating system implemented in Australia to indicate the energy efficiency of an appliance. Such product and service accreditation schemes would need to be implemented by consumer groups in partnership with industry and Government bodies to ensure that goods and services better meet consumers’ needs across the life-cycle. There also needs to be in place means for the recognition of design and manufacturing excellence as a way of reinforcing good design.

6.2 The Telephone

Problem—telephone line quality—uninsulated copper wire in remote areas—upgrade old lines in rural areas.

[Report of Flinders Island Group - Video-conference Workshop]
There has been some progress in the quality of telephone services in non-metropolitan Australia over the past decade, for example, the replacement of old manual exchanges, telephones which can be programmed with important numbers, and missed call connection. Despite such improvements, participants in *Making the Connections* remained concerned about the poor quality of telephone lines in parts of rural and remote Australia. Some locations had an unreliable telephone service—a particular problem for people living in areas outside larger urban centres. One rural area in northern New South Wales had been out of service for up to 16 days in late 1999 as a result of an electrical storm. Participants were very concerned at the implications of reductions in availability of technicians at a local and regional level. Such concerns were compounded by the need to contact centralised call-centre-based systems for the reporting of problems and faults, with a regional contact number no longer being provided.

One implication of the centralisation of services is that older people living outside capital cities or major rural centres are increasing their reliance on the telephone to access a range of information, goods and services. For older people this has an impact on the cost (financial and time) associated with using the telephone for access to these services. This cost can often flow on to relatives, friends and workers in community organisations who assist older people, and in the process can undermine the independence of the older person.

*Making the Connections* participants from small communities and rural areas were concerned that calls to the nearest regional centre usually had to be made at long distance call rates as the regional centre lay outside the local call zone. The call zones currently in place were established some time ago and based on technical limitations which have been made redundant by more recent developments in telephone technology. There was a strong demand for the review of such call zones so that all areas within the catchment zone of a regional centre can call that centre at local call rates.

In spite of legislated *Universal Service Obligations* in Australia, access to a telephone cannot be assumed for all households. Approximately four per cent of Australian households are without a telephone, however this includes relatively large numbers of households of disadvantaged groups (e.g. indigenous households). Even when a telephone is available in the home, other factors including call costs, disability and skills level can present significant barriers to use of the telephone. Many low income earners have restricted services (e.g. local call access only) which mean that they cannot independently access all telephone-based services.

Information on specialised and disability services available under *Universal Service Obligations* has not been integrated into the general marketing program of the current designated Australian provider, Telstra. Information on these services is not readily available to many rural and remote consumers, and Telstra has failed to make adequate use of key information diffusers in regional areas. Information provision by Telstra tends to be reactive rather than pro-active which creates difficulties for older people who cannot request information on a service about which they have no knowledge. As a result, older consumers in non-metropolitan areas, with a disability affecting their ability to use a standard telephone service, are facing additional and unnecessary barriers in the use of the telephone. Such barriers have a negative impact on overall wellbeing and quality of life for these older people.

Even those older people who are able to use a standard telephone can find this does not guarantee access. It was highlighted during *Making the Connections* that not all residents in rural communities have been provided with the touch-dial telephones required to access automated telephone services. Participants also identified that the automated telephone systems in place within a range of organisations can have unnecessary barriers for older people associated with the use of language in menu choices, the number of menu options and the time-out arrangements. Automated telephone systems tend to be provided in the assumption that the consumer can readily identify the category for their inquiry and can easily and succinctly describe their needs.

The design of telephone-based systems needs to take into account the way in which rural people perceive and use technology, particularly to seek information and services. Rural people have a strong preference for face-to-face services, for telephone-based services to be provided from a local
or regional level, and for direct contact with a receptionist rather than the need to negotiate complex number-based systems. Making the Connections participants reported that it is often difficult to reach a live human voice through automated systems. Many systems have a complex menu to be negotiated before the required information can be obtained. In order for increased numbers of older people in non-metropolitan Australia to use automated telephone systems requires design improvements and a greater commitment to the application of the established design standards. Participants highlighted that greater standardisation of automated systems is important if people are to be able to transfer skills that are learnt from one system to another. Older people also need to be provided with improved opportunities to develop skills in the use of automated telephone systems and call centres. The provision of printed information is not enough and consumer education needs to recognise and respond to the needs of people with limited literacy skills and other special needs.

With the increasing prevalence of call centres Making the Connections participants had found that calls to businesses and services are being taken from across Australia, usually by an operator lacking any knowledge of the local area. The location of the call centre was not always disclosed to the caller. Among a range of concerns expressed was that call centre systems seldom allow sufficient time to ensure that people understand what they are being told and that older people are not always given sufficient time to remember or record the required information. The lack of consistency in persons dealing with calls to the same service or business also created problems, and heightened the sense of alienation, which can be associated with using such systems. Participants in Making the Connections also found the waiting times for many call centre services were unacceptable to them.

How can you believe ‘We are interested in your inquiry’ when you hear it for the sixth or more times. Call centres seem to be understaffed. I realise that there must be a high turnover of staff for that type of work. All the same I reckon that supervisors should be monitoring the number of callers and increasing the numbers of receptionists in the peak periods.

[Chat Group Participant]

One thing about call centres and older people is that after ten minutes of holding on, a person with neck or shoulder problems, or arthritic hands can find it just too painful to hang on any longer, and hang up.

[Bulletin Board Participant]

It is essential that any consumer training initiatives (to encourage older people to make more use of these new telephone based systems) be complemented by a review of standards by service providers to ensure greater responsiveness to customer needs. This should include the human as well as the technical elements.

Also, when you finally reach a human, they are not always helpful: better training for humans is needed.

[Report of Charleville Group, Video-conference Workshop]

Some telephone operators’ voices are difficult for hearing impaired people to understand because of the pitch or tone of voice. This should be taken into account when hiring staff to work in these centres.

[Report of the Flinders Island Group, Video-conference Workshop]

Participants discussed the implications of mobile telephone technology. Although cost and coverage limitations remain significant barriers, mobile telephones were seen by many of the older participants in Making the Connections as a means of enhancing personal safety. However, the safety potential of the mobile telephone is restricted as coverage still tends to be very limited in rural and remote areas, particularly outside larger urban centres where reception is often confined to a narrow strip along major highways. This means that the mobile phone is not useful in outdoor situations in which telephone-based personal alarm systems are not viable (in rural areas many older people remain living on rural properties). In addition, a number of mobile telephone design issues were identified including miniaturisation, making them difficult for many people to use, poor colour contrast on the keypad, and lack of hearing aid compatibility. It was felt that with
improved coverage and design the mobile telephone could have an important role in improving safety and security for older people in rural and remote areas. One suggestion was for a low cost mobile telephone to give access to emergency services.

6.3 Computers and Online Technology

My word Nan! I had no idea you were an internet junkie!! Thankyou very much for dropping us a line, and in honour and recognition of your new surfing abilities I hereby crown you TECHNO-NAN!!! INTERNET EXPLORER, QUEEN OF CYBERSPACE, LAWNMOWER WOMAN!!!

[Email from Grandson to Grandmother, quoted by Chat Group Participant]

My use of the online facilities of my computer gave me the chance to communicate cheaply and in a very fast way, with family and friends at the other side of the world, as well as here locally. E-mail, contact via voice mail, etc., gave me a lot of pleasure and useful opportunities.

[Bulletin Board Participant]

The virtual components of the Making the Connections project has demonstrated that there are older people in rural and remote areas of Australia interested in using computers and other online technology. Participants acknowledged the potential of online technology to allow contact with family members and friends, to pursue interests and to participate in online learning. However, there are a number of constraints to the effective use of online technology by older people living outside the major cities of Australia. Participants emphasised that online technology initiatives by Government, business, and community organisations need to complement, rather than be seen as a replacement for more direct and personal forms of contact.

Today we socialise on the net
Is this as good as it will get
We thought we’d join the techno race
What happened to good old face-to-face

[Poem contributed to Making the Connections Chat Group
Tuesday 7 September 1999 by the Armidale VIPHEO Group]

Access and skills development are important pre-requisites for the participation of non-metropolitan older Australians on the ‘information superhighway’. The cost of hardware, software, and Internet access are significant barriers, particularly for low-income groups already struggling to afford a telephone service in the household. Equity of access between metropolitan and non-metropolitan areas was a serious concern for Making the Connections participants.

Due to smaller populations and longer distances than on the coast, it is always going to cost more (on a unit cost basis) to bring services (technological and human) to areas such as South-West Queensland. The group felt strongly ‘We are usually forgotten west of the range’ (the Great Dividing Range). The situation will remain the same—unless there is more commitment from all big stakeholders to subsidise services in the bush from city profits.

[Report of Charleville Group, Video-conference Workshop]

Public access and education initiatives are crucial. However, the spread and accessibility to older people of public access points is uneven across non-metropolitan Australia. There was some concern about the ongoing viability of some existing public access provision given the short-term nature of funding for such initiatives, including those funded under the Networking the Nation program. Some public access venues are not particularly ‘seniors friendly’, especially for older people with limited literacy, and/or a disability. Participants noted the need for development of a greater range of public access options, particularly to take technology and learning opportunities to older people in environments in which they are already comfortable (e.g. mobile online centres, access points in seniors centres, residential care facilities, and community centres). A pro-active approach is particularly important for marginalised groups (e.g. Aboriginal Elders, people living in residential care facilities).
We are finding that the placing of computers in retirement complexes is having a number of exciting and not-thought-of consequences, e.g. learning to use email has brought a number of people into contact with family members and changed their outlook on life. The internet has given them a dimension and encouraged their mental activity, which has a marked effect on their physical health.

[Member of eLaunceston Project in Chat Group]

Even when people have a computer and Internet access in the household there is still no guarantee of a reliable service because of line quality problems.

Unfortunately my telephone line keeps dropping me off the Net so I’m worried I’ll be cut off at any second. I live out of town and it seems to be a common problem for non-metropolitan internet users.

[Chat Group Participant]

Participants highlighted that not all rural areas in Australia have access to an Internet Service Provider (ISP) at local call rates, although there have been improvements recently as a result of initiatives funded under the Networking the Nation program. However, participants in Making the Connections emphasised that rural people still had a more limited choice of ISPs than their city counterparts, and also that rural ISPs can be overloaded, making it difficult to access the Internet, particularly during peak periods.

There was some diversity in the views expressed during Making the Connections on the potential impact of online technology on the lives of older people in non-metropolitan Australia. For example, there was concern about the potential for e-commerce to further undermine business viability in rural communities. Participants highlighted that any decline in availability of local business is likely to impact disproportionately on older people. Participants were concerned about safety and security issues associated with purchasing goods and services over the Internet. However, the benefits of online technology were also highlighted, particularly for people who are housebound and/or geographically isolated.

You know if Governments would spend more money on preventing people from getting sick then they would spend less on very expensive doctor health.....I think access to the internet is good for the emotional health of older people...I have a lovely man here over 90 who tells me the internet is the reason he gets out of bed in the morning. The only real people he sees are the Home and Community Care workers.

[Chat Group Participant, Co-ordinator of a Seniors’ Service]

I like the idea of having support chat groups. If say carers groups from all over the world worked together we could have a chat group manned by professional people 24 hours a day.

[Chat group Participant, Co-ordinator of a Seniors’ Service]

Access to appropriate opportunities to learn about and make use of online technology were significant issues for participants in Making the Connections. There was some concern that generalist training initiatives are not always responsive to the learning needs and interests of older people. Negative perceptions of the learning capacity of older people by trainers represent a significant barrier. Mentoring and peer support have been a key component of the learning models successfully applied in seniors technology initiatives across Australia (e.g. Seniors-On-Line, Seniornet, Australian Seniors’ Computer Clubs Association). The importance of integrating universal access considerations into community initiatives was also highlighted with incidence of disability increasing with age.

During Making the Connections, the discussion on online technology included electronic banking systems as this has been a current issue of concern among Australians living in small communities. As bank branches have closed in many smaller communities older people find that they do not have local access to branch services and are either forced to travel long distances for face-to-face services, and/or are required to use electronic or telephone banking services. There were concerns over the design and siting of ATMs, as well as safety and security considerations in their use. Participants identified that the increasing reliance on electronic banking was not being matched with access to
opportunities to learn about using the technology. Although the Commonwealth Government and
the banking industry had undertaken a training initiative during 1999, few participants had heard
of or actively participated in this project. This suggests that the effective reach of the project had
been limited. There was concern that the level of response to the funding of training initiatives by
business and Government was inadequate in view of the high level of need in regional Australia.
Electronic business and Government services also received extensive attention in the recent HEROC
inquiry on e-commerce and older people.

7. CONCLUSION

The Making the Connections project has successfully involved older people from across non-
metropolitan Australia. It has been innovative for the way in which technology has been used as an
integral part of the project, which has shown the potential for increased use of technology in
consulting with older people living outside capital cities and major regional centres.

Older people and others interested in the implications, for those living in non-metropolitan
Australia, of an increasing reliance on technology can move beyond identifying the issues to
identifying solutions to these problems. Government has a crucial role in ensuring that the interest
and commitment of those older Australians who participated in this project are rewarded through
the provision of the necessary resources for positive change to occur. The point was made that such a
commitment has to move beyond the current tendency towards tokenism.

The question asked was ‘Does the Federal Government want people out
here at all?’ The group felt that Bronwyn Bishop’s [Commonwealth
Minister for Aged Care] two initiatives—education about banking (has
not been sighted here) and the $60,000 for U3A ..were highly inadequate
to say the least!

[Report of Charleville Group, Video-conference Workshop]

This project has identified the breadth of issues relating to the impact of technology on day-to-day
life and which, over the next decade, are likely to have an increasing influence on the quality of
life of older Australians, particularly for those people living in non-metropolitan Australia. Yet it
was recognised and acknowledged by the participants in Making the Connections that the need for
action and change does not lay with Government alone. With technology being a global industry,
improvements in design and implementation can only occur if pressure is placed on designers and
manufacturers in both our own, and other, countries using appropriate international forums.

However, the Ministers and Departments at State and Commonwealth levels responsible for policy
and practice development in relation to ageing do have a crucial role in ensuring an inclusive
technology environment for Australia’s older residents. This includes the development of improved
cross-departmental consultation and collaboration at all levels of Government to ensure that
technology related policies and practice cover consideration of the particular needs of older people,
including particular consideration of those living in non-metropolitan areas.

This project proved timely with the Commonwealth Government requesting the Human Rights and
Equal Opportunity Commission (HEROC) to undertake an Inquiry into Access to electronic commerce
and new information and service technologies for older Australians and people with a disability.
The Making the Connections project has been used by HEROC as one source for the Inquiry. The
Secretary of the Inquiry took part in the video-conference and was the ‘guest speaker’ on one chat
session. A link to the Making the Connections web site was included in the online resources of the
Inquiry. However, it is important to note that the discussions of Making the Connections have
canvassed a much broader range of technology related issues than the HEROC Inquiry, which was
confined by its terms, to electronic commerce, new service and information technologies.

Making the Connections has already had some tangible outcomes in improved liaison and
collaboration between key technology initiatives from across Australia through the development of
the EAT-Network. The EAT-Network listserver, established in December 1999 and currently managed by The Rural Development Centre, is playing a vital role in providing a venue for the exchange of information and ideas. However, this virtual network needs seed funding to enable it to more effectively fulfil the plans made at the Making the Connections conference. The listserver is also assisting to identify people in a range of disciplines undertaking research in the area of older people and technology (many of whom are ‘older’ themselves). It is important that such researchers are given appropriate opportunities to diffuse their findings. The Making the Connections conference was an important first step, but needs to be followed by similar events, perhaps on a biennial basis. Just as with Making the Connections, future events need to integrate the use of online technology to increase the opportunities for active participation by older people from across Australia.
ATTACHMENT 1

Making the Connections Online Conference

Characteristics of Participants
1. LOCATIONS USED TO PARTICIPATE IN THE ONLINE CONFERENCE

1.1 Total participants by State

<table>
<thead>
<tr>
<th>State</th>
<th>Number of participants</th>
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<tbody>
<tr>
<td>Overseas</td>
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1.2 Location used to participate in conference - New South Wales

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<tr>
<th>Location</th>
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<th>Overseas</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>Comm. org</td>
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<td>2</td>
</tr>
<tr>
<td>Comm. Access Cntr/Telecentre</td>
<td>10</td>
<td></td>
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<tr>
<td>Home</td>
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</tr>
<tr>
<td>TAFE</td>
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</tr>
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<td>Workplace</td>
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<tr>
<td>University</td>
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</tbody>
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-Attachment 1.17-
1.3 Location used to participate in conference - Queensland

![Diagram showing the number of participants in Queensland for different locations: Home, Library, TAFE, Workplace, University, Comm. Access Cntr/Telecentre, Comm. org., School, Home of friend or relative.]

1.4 Location used to participate in conference - South Australia

![Diagram showing the number of participants in South Australia for different locations: Home, Library, TAFE, Workplace, University, Comm. Access Cntr/Telecentre, Comm. org., School, Home of friend or relative.]

-Attachment 1.18-
1.5 Location used to participate in conference - Western Australia

1.6 Location used to participate in conference - Northern Territory
1.7 Location used to participate in conference - Victoria

![Bar chart for Victoria showing locations and numbers of participants.]

1.8 Location used to participate in conference - Tasmania

![Bar chart for Tasmania showing locations and numbers of participants.]

-Attachment 1.20-
1.9 Location used to participate in conference - Australian Capital Territory

- Comm. Access Cntr/Telecentre: 11
- Workplace: 6
- University: 0
- Comm. org.: 2
- Home: 1
- Library: 1
- School: 0
- Home of friend or relative: 0
- TAFE: 0
- Australian Capital Territory (Number of participants)

1.10 Type of location by State - University

- New South Wales: 12
- Queensland: 6
- South Australia: 2
- Western Australia: 1
- Victoria: 1
- Northern Territory: 0
- Tasmania: 0
- Australian Capital Territory: 0
- Type of location by State (Number of Participants)
1.11 Type of location by State - Workplace

![Bar chart showing the number of participants by state for workplace locations.

1.12 Type of location by State - TAFE

![Bar chart showing the number of participants by state for TAFE locations.

-Attachment 1.22-
1.13 Type of location by State - Library

- New South Wales: 9
- Queensland: 8
- South Australia: 7
- Western Australia: 7
- Northern Territory: 6
- Victoria: 5
- Tasmania: 2
- Australian Capital Territory: 1

(Number of participants)

1.14 Type of location by State - Home

- New South Wales: 43
- Queensland: 38
- South Australia: 16
- Western Australia: 13
- Northern Territory: 12
- Victoria: 11
- Tasmania: 6
- Australian Capital Territory: 1

(Number of participants)

-Attachment 1.23-
1.15 Type of location by State - Community Access Centre/Telecentre

Location=Community Access Centre/Telecentre

- Australian Capital Territory: 2
- Tasmania: 11
- Victoria: 5
- Northern Territory: 0
- Western Australia: 5
- South Australia: 1
- Queensland: 2
- New South Wales: 1

(Number of participants)

1.16 Type of location by State - Community Organisation

Location=Community Organisation

- Australian Capital Territory: 2
- Tasmania: 11
- Victoria: 5
- Northern Territory: 0
- Western Australia: 5
- South Australia: 1
- Queensland: 2
- New South Wales: 1

(Number of participants)
1.17 Type of location by State - Home of friend or relative

1.18 Type of location by State - School
2. PLACE OF RESIDENCE OF PARTICIPANTS

2.1 Residence by State-Capital City

<table>
<thead>
<tr>
<th>Location</th>
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<td>New South Wales</td>
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</table>

2.2 Residence by State-Metropolitan fringe

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas</td>
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<tr>
<td>Unspecified-Australia</td>
<td>0</td>
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<tr>
<td>Australian Capital Territory</td>
<td>0</td>
</tr>
<tr>
<td>Tasmania</td>
<td>1</td>
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<tr>
<td>Victoria</td>
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<tr>
<td>Northern Territory</td>
<td>0</td>
</tr>
<tr>
<td>Western Australia</td>
<td>2</td>
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<tr>
<td>South Australia</td>
<td>6</td>
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<tr>
<td>Queensland</td>
<td>5</td>
</tr>
<tr>
<td>New South Wales</td>
<td>2</td>
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</tbody>
</table>
2.3 Residence by State - Large Regional Centre

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas</td>
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<td>Victoria</td>
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<td>Northern Territory</td>
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<td>South Australia</td>
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</table>

2.4 Residence by State - Small Regional Centre

<table>
<thead>
<tr>
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<tbody>
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<td>Victoria</td>
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<tr>
<td>New South Wales</td>
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</tbody>
</table>

-Attachment 1.27-
2.5  **Residence by State- Town**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Victoria</td>
<td>3</td>
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<tr>
<td>Northern Territory</td>
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<td>Queensland</td>
<td>8</td>
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<tr>
<td>New South Wales</td>
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</tbody>
</table>

2.6  **Residence by State- Village**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
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<td>Tasmania</td>
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<tr>
<td>Victoria</td>
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<tr>
<td>Northern Territory</td>
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<tr>
<td>Western Australia</td>
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</tr>
<tr>
<td>South Australia</td>
<td>2</td>
</tr>
<tr>
<td>Queensland</td>
<td>1</td>
</tr>
<tr>
<td>New South Wales</td>
<td>5</td>
</tr>
</tbody>
</table>
2.7 Residence by State - Rural

<table>
<thead>
<tr>
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</tr>
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</table>

2.8 Residence by State - Remote

<table>
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<tr>
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</tr>
</thead>
<tbody>
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<td>Tasmania</td>
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<tr>
<td>Victoria</td>
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<tr>
<td>Northern Territory</td>
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</tr>
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<td>Queensland</td>
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<tr>
<td>New South Wales</td>
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</tr>
</tbody>
</table>

-Attachment 1.29-
3. CATEGORY OF PERSON

3.1 Category by State—Education and Research

3.2 Category by State—Local Government, Commonwealth Government and State Governments

-Attachment 1.30-
### 3.3 Category by State—Older persons

**Location**
- Overseas: 4
- Unspecified-Australia: 0
- Australian Capital Territory: 5
- Tasmania: 18
- Victoria: 23
- Northern Territory: 4
- Western Australia: 9
- South Australia: 17
- Queensland: 30
- New South Wales: 42

### 3.3 Category by State—Non-profit Organisations and Seniors Organisations

**Location**
- Overseas: 1
- Unspecified-Australia: 0
- Australian Capital Territory: 4
- Tasmania: 3
- Victoria: 5
- Northern Territory: 1
- Western Australia: 3
- South Australia: 3
- Queensland: 5
- New South Wales: 6

-Attachment 1.31-
3.4 **Category by State—Carers, Librarians and Volunteers**

<table>
<thead>
<tr>
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<th>Carer</th>
<th>Librarian</th>
<th>Volunteer</th>
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<tr>
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<tr>
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</table>

3.5 **Category by State—Home & Community Care, Health Centre, Community Access Centre/Telecentre**

<table>
<thead>
<tr>
<th>Location</th>
<th>Home &amp; Community Care</th>
<th>Health Service</th>
<th>Community Access Centre/Telecentre</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
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<tr>
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<tr>
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<tr>
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-Attachment 1.32-
### 3.6 Category by State

<table>
<thead>
<tr>
<th>Location</th>
<th>Residential Care</th>
<th>Aboriginal Organisation</th>
<th>Advocacy Service</th>
<th>E-Commerce</th>
<th>Media</th>
<th>Other-Not Specified</th>
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</table>

-Attachment 1.33-
Making the Connections
Video-Conference Sites

Australia

- WA
- NT
- QLD
- NSW
- VIC
- TAS
- Charleville
- Armidale
- Cherbourg
- Sydney
- Canberra
- Horsham
- Tumby Bay
- Flinders Island
ATTACHMENT 3

Making the Connections Conference
19 and 20 November, 1999
University of New England, Armidale

List of Conference Presenters

Astbrink, Gunela
Telecommunications & Disability Consumer Representation Project Blind Citizens Australia
15/20 Woodstock Ave Taringa, QLD 4068
Email g.astbrink@gsa.com.au

Downing, Andrew
School of Informatics & Engineering Flinders University
PO Box 2100 Adelaide, SA 5001
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Blackson, Bobbie
Australian Communication Exchange PO Box 473 Stones Corner, QLD 4120
Email Bobbie Blackson@aceinfo.net.au

Foskey, Ros (Project Director)
The Rural Development Centre University of New England Armidale, NSW 2351 Phone 02 67732094
Email rfoskey@metz.une.edu.au

Braxton, Dorothy Irizarry, Carol
(U3A Online) School of Social Work & Social Administration
3/9 Lidgett Pl Florey, ACT 2615
Email dbraxton@pcug.org.au

Blackson, Bobbie
Australian Communication Exchange PO Box 473 Stones Corner, QLD 4120
Email Bobbie Blackson@aceinfo.net.au

Foskey, Ros (Project Director)
The Rural Development Centre University of New England Armidale, NSW 2351 Phone 02 67732094
Email rfoskey@metz.une.edu.au

Braxton, Dorothy Irizarry, Carol
(U3A Online) School of Social Work & Social Administration
3/9 Lidgett Pl Florey, ACT 2615
Email dbraxton@pcug.org.au

Burling, Bob Compasale 264 Beardy St Armidale, NSW 2350
Email rburling@compasale.nsw.com.au

King, Don
Seniors Education Centre University of Regina Saskatchewan Canada
Email Don.King@uregina.ca

Clark, Robyn Royal Blind Society PO Box 176 Burwood, NSW 2134
Email rclark@rbs.org.au

Malone, Phil Manager E-Commerce National Office for the Information Economy Email phil.malone@noie.gov.au

Des Arts, Hilda 9 Charles Street Brassall Ipswich, QLD 4305
Email gilda@gil.com.au

Miles, Alison Prometheus Information PO Box 160 Dickson, ACT 2602
Email prometheus@ozemail.com.au

De Silva, Dilly Ergonomics & Occupational Health Group Australian Physiotherapy Association
Email dilly_de_silve@hotmail.com

-Attachment 3.37-
Noonan, Tim
Softspeak Computer Services
9/6-10 Glebe St
Parramatta, NSW 2150
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Slegers, Claudia
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Communication & Information Technologies
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Melbourne, Vic 3001
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Swindell Rick
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Curriculum Teaching & Learning
Griffith University
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Williamson, Kirsty
Director
Information & Telecommunications Needs
Research (ITNR), School of Information
Management & Systems (SIMS)
Monash University
Email jirsty.williamson@sims.monash.edu.au
and Senior Research Fellow
School of Information Studies
Charles Sturt University
Email kwilliamson@csu.edu.au
ATTACHMENT 4

Making the Connections Conference Program

19 and 20 November, 1999
Making the Connections
A national event for the
International Year of Older Persons

Two-Day Conference

Education Building
University of New England, Armidale

Friday, 19 November 1999
and Saturday, 20 November 1999

The Rural Development Centre
University of New England
Armidale, NSW
Day One  
Friday, 19 November 1999

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>8:45 a.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>9:00</td>
<td>Welcome – Ros Foskey</td>
</tr>
<tr>
<td></td>
<td>Conference Convener,</td>
</tr>
<tr>
<td></td>
<td>Rural Development Centre, University of New England.</td>
</tr>
<tr>
<td>9:15</td>
<td>Keynote Address</td>
</tr>
<tr>
<td></td>
<td>&quot;Technology - Blessing or Curse&quot;</td>
</tr>
<tr>
<td></td>
<td>Professor Andrew Downing, Dean of Engineering,</td>
</tr>
<tr>
<td></td>
<td>School of Informatics and Engineering, Flinders University.</td>
</tr>
<tr>
<td>10:00 to 10:15</td>
<td>Morning tea</td>
</tr>
<tr>
<td>10:15 to 11:00</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td></td>
<td>1. &quot;Business and E-Commerce&quot;</td>
</tr>
<tr>
<td></td>
<td>Phil Malone, Manager, E-Commerce, National Office for the Information</td>
</tr>
<tr>
<td></td>
<td>Economy.</td>
</tr>
<tr>
<td></td>
<td>2. &quot;Information just a keyboard away&quot;</td>
</tr>
<tr>
<td></td>
<td>Demonstration of a web portal to information on health and ageing.</td>
</tr>
<tr>
<td></td>
<td>Alison Miles, Promotion Manager, Prometheus Information</td>
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<td>11:00 to 12:00</td>
<td>Concurrent Sessions</td>
</tr>
<tr>
<td></td>
<td>1. &quot;Technology Without Fears&quot;</td>
</tr>
<tr>
<td></td>
<td>Discussion and demonstration of a program aimed at bridging gap in</td>
</tr>
<tr>
<td></td>
<td>understanding of new forms of technology.</td>
</tr>
<tr>
<td></td>
<td>Carol Irizarry and Andrew Downing, Flinders University</td>
</tr>
<tr>
<td></td>
<td>2. &quot;Body Matters&quot;</td>
</tr>
<tr>
<td></td>
<td>Workstation design and healthy keyboard skills.</td>
</tr>
<tr>
<td></td>
<td>Dilly de Silva, Ergonomics and Occupational Health Group, Australian</td>
</tr>
<tr>
<td></td>
<td>Physiotherapy Association.</td>
</tr>
</tbody>
</table>
12:00 to 1:00  Concurrent Sessions

1. “Design Matters”
   Web Design for Universal Access.
   Tim Noonan, Blind Citizens Australia E-Commerce Project.
   Claudia Slegers, Centre for International Research on Communication and Information Technologies (CIRCIT) at RMIT, Member of the Deaf Australia Online Project

2. “Breaking Down the Barriers”
   Community Initiatives for Seniors Learning Computer Skills.
   Hilda des Arts, Seniornet Queensland.
   Carol Irizarry and Andrew Downing, Seniors-On-Line, South Australia.

1:00 to 1:45  Lunch

1:45 to 3:00  “Never too old to learn online”
   Using online technology for lifelong learning.
   U3A Online.
   Rick Swindell, Griffith University.
   Dorothy Braxton, Canberra.
   Don King, Director, Seniors Education Centre, University of Regina, Saskatchewan, Canada.

3:00 to 3:15  Afternoon tea

3:15 to 4:45  Concurrent Sessions
   “Making Technology Accessible”
   Meeting the needs of people with a disability.
   Gunela Astbrink, Telecommunications and Disability Consumer Representation Project, Blind Citizens Australia.
   Robyn Clark, Royal Blind Society of New South Wales.
   Bobbie Blackson, Australian Communication Exchange.
   Kirsty Williamson, Director, Information and Telecommunications Needs Research (ITNR), School of Information Management and Systems (SIMS), Monash University.

4:45 to 5:30  Live Chat session with William Telecentre in Western Australia.
# Day Two

**Saturday, 20 November "Planning for the Future"**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 a.m.</td>
<td>Welcome</td>
</tr>
<tr>
<td>9:05</td>
<td><strong>Keynote Address</strong></td>
</tr>
<tr>
<td></td>
<td>&quot;New Plants in Older Gardens&quot;</td>
</tr>
<tr>
<td></td>
<td>Dr Don King, Director, Seniors Education Centre, University of Regina, Canada.</td>
</tr>
<tr>
<td>The day is then divided into four workshop sessions:</td>
<td></td>
</tr>
<tr>
<td>9:45 to 11:00</td>
<td><strong>Session One: “General Technology Issues”</strong></td>
</tr>
<tr>
<td></td>
<td>Panel Discussion to introduce the topic.</td>
</tr>
<tr>
<td></td>
<td>Ros Foskey, Rural Development Centre, University of New England.</td>
</tr>
<tr>
<td></td>
<td>Professor Andrew Downing, Flinders University.</td>
</tr>
<tr>
<td></td>
<td>Workshop Discussion.</td>
</tr>
<tr>
<td>11:00 to 11:15</td>
<td><strong>Morning tea</strong></td>
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<tr>
<td>11:15 to 12:15</td>
<td><strong>Session Two “Telephone access and use”</strong></td>
</tr>
<tr>
<td></td>
<td>Panel Discussion to introduce the topic.</td>
</tr>
<tr>
<td></td>
<td>Ros Foskey, Rural Development Centre, University of New England.</td>
</tr>
<tr>
<td></td>
<td>Tim Noonan, Blind Citizens Australia.</td>
</tr>
<tr>
<td></td>
<td>Bobbie Blackson, Australian Communication Exchange.</td>
</tr>
<tr>
<td></td>
<td>Workshop Discussion.</td>
</tr>
<tr>
<td>12:15 to 1:00</td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td>1:00 to 2:00</td>
<td><strong>Session Three: “Online technology awareness, access and training”</strong></td>
</tr>
<tr>
<td></td>
<td>Panel Discussion to introduce the topic.</td>
</tr>
<tr>
<td></td>
<td>Carol Irizarry, Seniors-On-Line, South Australia.</td>
</tr>
<tr>
<td></td>
<td>Hilda des Arts, SeniorNet.</td>
</tr>
<tr>
<td></td>
<td>Bob Burling, Compsale Armidale.</td>
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<td>Gunela Astbrink, Telecommunications Disability Consumers Representation Project.</td>
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<td>Workshop Discussion.</td>
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-Attachment 4.43-
2:00 to 3:00  
Session Four: "Older people using Online technology"
Panel Discussion to introduce the topic.
Ros Foskey, The Rural Development Centre, University of New England.
Dorothy Braxton, U3A Online.
Don King, Seniors Education Centre, Canada.
Rick Swindell, Griffith University.
Workshop Discussion.

3.00 to 3.15  
Afternoon tea

3:15 to 4:00  
Review of workshop sessions and development of a "plan of action" and recommendations from Conference.
ATTACHMENT 5

General Technology Issues and Suggested Solutions

When I go out to purchase one of today’s electronically controlled appliances, or camera, I purchase where the sales person can give me the most information possible.
Bulletin Board Participant

Many older people (younger than me) have difficulty with many aspects of modern equipment. Bank instructions are impenetrable, user manuals are in Jinglish, and most salespeople only want to impress you with their brilliance. How do we tell them that if info is presented slowly and clearly, everyone could use and enjoy the stuff, instead of being put off by it.
Chat Group Participant

DESIGN

Issues

• Appliances are not user-friendly.
• Lack of product standardisation (for example number location on keypads).
• Increasing miniaturisation to make appliances more portable often detracts from the ease of use of the product (e.g. mobile telephones).
• Touch and visual display systems which help to overcome problems associated with manual dexterity of the user, can introduce difficulties for other users particularly people with a vision impairment (e.g. the absence of tactile indicators on electric cooktops).
• Some appliances require an increasingly high level of literacy skills because of complex information programming requirements (e.g. microwaves, VCRs).
• Product manufacturers tend to 'impose' their products onto consumers, making top-down decisions about what products consumers' need, and then expecting consumers to adapt to the product provided.
• Governments are backing away from spending money on standards and guidelines, leaving these in the hands of the industries concerned. As a result the needs of some groups of consumers are being overlooked.

Suggested Solutions

• Designers need to be educated to better understand the needs of consumers across the life span. What is required is full market consultation and testing with a broad range of consumers, including older consumers and consumers without sophisticated technology skills.
• Products need to be designed to take into account the diversity of needs among consumers.
• Product developers need to be aware that a proportion of the user group will have limited literacy.
• Retailers need to be educated to deliver ‘seniors friendly’ service to ensure that the product they are selling is appropriate to the consumer's specific needs.
• People responsible for selecting appliances for housing and facilities likely to attract a high proportion of older people need to take care to make their selections on universal design principles.
• Strategic partnerships need to be formed between consumer groups, (including those representing older consumers) and industry; so that consumers have a greater degree of influence over the development and implementation of industry standards.
PRODUCT EVALUATION

Issue

*We need some National Awards for excellent trans-generational design.*

Chat Group Participant

This was often posed by participants as a question—how do you know that your appliance is a good design?

Suggested Solution

* Groups representing older consumers collaborate with industry and peak bodies such as the Australian Consumers’ Association to form an accreditation scheme, to evaluate products against specific criteria. Products will then be labelled to show consumers what grading each receives under the accreditation, including trans-generation design accreditation (similar to the Heart Tick, or energy rating system).

TECHNOLOGY EDUCATION

When people talk of training they usually think of training end users to use the monsters created. How about training those that created systems how to consider disability and age when creating these systems.

Chat Group Participant

Sales people take it for granted that a purchaser understands their acronyms and their jargon. Usually for the purchaser there is so much to take in that the bulk of it gets lost. Most are unwilling to come back again—it takes time for a person to learn about the new operation. Perhaps there should be training for the salesmen—not so much about their goods—but in communication skills.

Bulletin Board Participant

As a retired farmer I am accustomed to read operating instructions from manuals which in general were quite good for the farm equipment I purchased over my 45 year farming career. However, when I purchased the computer I was very annoyed that the information needed to operate this device and it’s operating system were not in printed form in a manual. Very confusing are the abbreviations used by experts in the computer related topics.

Bulletin Board Participant

Issues

* Older consumers need technology demystified.
* A high proportion of older people living outside metropolitan areas of Australia have limited literacy skills (identified in the ABS National Literacy Survey 1996).
* Instruction manuals are often too hard to understand.
* Use of confusing jargon by manufacturers, advertisers and retailers.
* Poor quality of sales information and service by many suppliers and retailers.
* Increased consumer awareness gives consumers the confidence to question retailers and salesmen about product performance and quality.

Suggested Solutions

* Literacy programs for older people that include technology literacy skill development.
* Travelling ‘Roadshow/s’ in various locations to demonstrate how specific and everyday pieces of technology work.
• Peer education, paced to the consumers needs, used to complement the ‘roadshow’ concept.
• Creative use of education/information programs using a variety of media, including television and radio.
• ‘Infotainment’ programs used to increase competition between manufacturers/retailers e.g. key companies with a good range of goods promoting goods on basis of good design, i.e. trans-generation design characteristics.
• Manuals written for products manufactured in non-English speaking countries, re-written in plain English by native English speakers. Often meaning is lost in translation, making the technical language even more confusing for consumers.
• Partnerships encouraged between researchers, technology organisations, seniors groups and peak consumers organisations such as the Australian Consumers’ Association (ACA), to encourage training programs and accreditation schemes for retail stores and their staff. Such schemes would emphasise customer-friendly service and information.
• Strategic partnerships between retailers and consumer groups to target product designers and manufacturers in development of their instruction manuals to ensure user-friendly, plain English information. Also to encourage the development of education programs for consumers.

**BANKING**

> The terminals are not vision friendly, the terminals don’t give people enough time when they are unsure, terminals are placed in places which make people feel vulnerable.

Chat group participant responding to the question ‘What are the issues from your perspective with banking technology’.

**Issues**

• Bank branches are being closed in many small communities across Australia and are often replaced with the installation of an Automatic Teller Machine (ATM).
• Where ATMs replace bank branches in small communities there are then no local bank staff to educate customers in their use.
• ATMs do not give some people sufficient time to transact their business when they are hesitant or unsure, and the stress involved can result in short-term memory loss.
• ATMs are not vision friendly—often poor sighting of the ATM accentuate the problems of glare off the screen.
• ATMs are placed in sites where older people feel vulnerable.
• Risk of exploitation and fraud is increased where a vulnerable older person gives personal details to a relative, friend or worker.
• ATMs do not allow the user to check all the information they require in order to be an informed consumer—for example a record of recent transactions.
• User instructions and formatting are not universal across ATMs.
• Joint Government/Banking Industry education program targeted at seniors on how to use ATM appears to have had very limited reach in rural areas. The majority of participants in all three activities did not know of this initiative.
• Current Australian standards cover only accessibility to ATMs and not user standards.

-Attachment 5.47-
**Suggested Solutions**

- Standardisation of the configuration of ATMs.
- Greater consideration be given to the siting of ATMs to ensure greater safety, less problems with glare and light reflection off the screen and physical accessibility.
- ATM may be transitionary technology and a forerunner to multipurpose units. Standardisation is very important.
- In order to ensure that ATM design is trans-generational it is crucial that designers seek input from older people, particularly those living in rural and remote areas without easy access to a bank branch.
- Further awareness and training programs on the use of ATMs for older people with a greater reach into rural areas, and to those not actively involved in ‘seniors’ organisations.
- Awareness campaign targeting the banking industry to improve awareness and understanding of the range of needs among consumers in rural areas.
ATTACHMENT 6

Telephone Issues and Suggested Solutions

How can you believe 'We are interested in your inquiry when you hear it for the sixth or more times'.

Chat Group Participant

One thing about call centres and older people is that after ten minutes of holding on, a person with neck or shoulder problems, or arthritic hands can find it just too painful to hang on any longer, and hang up.

Bulletin Board Participant

### AVAILABILITY AND ACCESSIBILITY OF TELEPHONE SERVICES

**Issues**

- The increasing dependence on the telephone to access information, goods and services by people in rural areas, reduces the independence of people unable to access or use a standard telephone service and this particularly impacts on older people.
- Ninety six percent of Australian households have a telephone connection. The 4% of households without a telephone include disadvantaged groups particularly low-income earners and this includes older people who are particularly vulnerable and at risk.
- Some low-income households with access to a telephone have ‘In-contact’ connections, where they can receive, but not make calls; other low income households have local call only and no access to make STD (long distance) calls from their home telephone.
- A telephone connection does not always mean access to all services, in rural areas there are still many telephone handsets in use in the homes of older people that are unable access Call Centres or telephone based account payment services.
- Some older people, particularly those with disabilities, are unable to use standard telephone services.
- Indigenous households in rural and remote Australia have a much lower level of access to standard telephone services than the overall Australian community. Older Aboriginal people often become dependent on the younger generation to assist with telephone contact for services they require. This can undermine the cultural authority of the Elders. (In 1999 the Rural Development Centre undertook a survey of 99 indigenous households in the Armidale area of NSW. These were a cross-section of household types including those with older members. The survey found that 15% of the indigenous households surveyed had no phone connection; 40% had only an In-contact service (only allowing for incoming calls and 000 emergency outgoing calls), 12% had exchange controlled access, 13% a keylock on the telephone and 14% Telstra ‘Easy call’ control options.)

**Suggested Solutions**

- There is a need to ensure that rural consumers, particularly older people, have their telephone handsets upgraded to enable them to access the full range of available services.
- Levels of access to telephone services for low-income people need to be given greater consideration by policy-makers in government at all levels, and by the business and service sectors in the design and implementation of telephone based services.
- Consistent nation-wide policies need to be implemented by government and business.
• Disability and aging issues need to be considered by business managers when establishing business marketing and telecommunication based services. The development of such plans should as a matter of course integrate research to understand the dynamics of the target population. Where a service is likely to be used by older people there is a need for consultation with older consumers to ensure that the design of systems is more responsive to their needs.

AVAILABILITY OF INFORMATION UNDER UNIVERSAL SERVICE OBLIGATIONS FOR PEOPLE WITH SPECIAL NEEDS

Issues

• Older people in rural areas and those working with them are often not aware of the full range of equipment and services that are available to them to assist them to use telephone services.

• Universal and trans-generational access is not integrated into the mainstream marketing strategies for telephone products and services, it is treated as a separate and distinct service issue. There are very few Telstra and similar retail outlets outside metropolitan and major regional centres. Even where these outlets exist, they concentrate on standard telephone and business equipment. The staff in such centres are often unaware of the range of assistive technology available. This is handled separately by a different section of Telstra dealing with disability services.

• Telstra has a range of information on the services available under Universal Service Obligations. The problem arises in that the distribution of this information is ‘reactive’ (that is responds to requests from individuals) rather than proactive (that is reaching out to consumers who may benefit from the information). Not enough information is being made available to community organisations, care and support services in rural and remote Australia.

• The experience of a number of care and support workers is that even where information on Disability Services is provided by Telstra to services, that it is often only provided with reluctance from the Telstra staff. When pamphlets or other information is actually sent it is not usually in sufficient quantities to enable the information to be effectively distributed to their consumers – thus the service bears the cost of photocopying the information for distribution to their consumers (i.e. Telstra is effectively transferring the cost of information distribution to community organisations and support services).

Suggested Solutions

• A more pro-active approach to information diffusion on services available under universal service obligations on the part of the provider contracted to supply this service (currently Telstra).

• Telstra and other Telecommunications services staff at all levels need to be better trained in what assistive technology is available, so that this information is more effectively marketed.

• Telstra and other Telecommunications service providers with shops located in regional areas should have information available on all types of equipment and services, including services for people with special needs.

RURAL AND REGIONAL ISSUES

Issues

• Unreliable line quality and delays in maintenance/repairs (for example in one area of northern NSW telephones were out of order for 16 days in 1999 as a result of an electrical storm). Uninsulated copper wire still present in remote areas. At the same time technical staff have been reduced to skeleton levels—for example on Flinders island there is only one technician.
Calls to report problems with telephone services and assistance can be taken from anywhere in Australia by people lacking local knowledge and understanding.

Despite the development of 12 super exchanges, regionalised call zones continue to affect costs to rural users. Anomalies occur where one user is being charged at local call rates while their neighbour is charged at STD rates for a call to the same centre.

The trend by business and government agencies to centralise services in regional centres means that the cost of centralisation is borne by the service consumer. More and more services can only be contacted and business and services negotiated by telephone due to the withdrawal of direct service provision. This means that greater numbers of calls are being made by people living in rural and remote area at STD (long distance call) rates.

Low income and disadvantaged people have been turning to community organisations to make calls on their behalf to regional centres. This effectively transfers the costs of the service onto often poorly funded and under-resourced organisations, it also results in a loss of independence and confidentiality for low income older people.

When telephone systems changed from the older pulse dialling to tone dialling, new handsets have not been issued to all consumers. In some rural communities existing telephones are only being replaced when older handsets are broken, this means that some telephone based information and account payment systems cannot be utilised by many older consumers who have older handsets.

There is a significant incidence of hearing loss in rural areas, however, businesses appears not to be aware of research in this area, and so do not consider the needs of hearing impaired people when implementing telecommunications based systems.

Personal alarm systems linked to the telephone have a limited coverage and are often unsuitable outside urban built-up areas as people’s normal movement patterns can often place them outside range covered. This is a significant unmet need among people on the land, note that the average age of Australian farmers is increasing—20% of owner managers in broad acre farming are over the age of 65 years.

Extensive delays have been experienced in having community sector phone lines re-connected when they relocate premises. In one case it took more than three weeks for Telstra to make a full service available to a relocated HACC (Home and Community Care) service in northern NSW.

'Black holes' in mobile phone coverage. In Australia mobile phone services are concentrated on urban populations and along major highway routes. Rural areas have only patchy coverage, if any at all. Many older mobile phone owners invest in them as a safety precaution yet without coverage there is no safety.

Privacy policies relating to service access via the telephone have unintended consequences. For example, with the withdrawal of the face to face, or over the counter, services in many rural communities the consumer must personally ring and give details for connection of a telephone or electricity. However, if an older person has a disability such as a hearing impairment they cannot negotiate this service using a normal telephone which is often the only option available to them.

**Suggested Solutions**

- Priority be given to the upgrade of old and unreliable land lines in rural areas.
- Public relations training for staff taking requests for connection, repair and relocation of telephone services. Improved systems to receive complaint, test for problem and arrange an appropriate response.
- Change to local call zones taking into account the regional centres in which services are being centralised. Some participants suggested a single call zone for each State. At the very least local call zones should include all areas within the catchment of regional centres.
- Tone phone handsets should be issued automatically in all areas with tone dialling to enable access to services that are inaccessible to pulse dial phones.
- Improved diffusion of research findings with implications for service policy and service delivery to bring about a greater awareness of community/consumer needs within government and business.
- More reliable alarm phone systems with a wider range should be developed for geographically isolated older people at risk, particularly those who live outside built-up urban areas. One suggestion was a satellite based, special emergency contact only, mobile telephone system.
• Extension of mobile telephone coverage outside regional centres and the major highways.

AUTOMATED SYSTEMS

Issues

• Limited literacy is a problem for some older people in rural areas attempting to adapt to changing service provision.

• Older pulse dialling phones remain common in households within some rural communities, these consumers are unable to access automated systems.

• Provision of automated services tends to be based on the assumption that consumers know exactly what they want when seeking information and/or services, and can then classify this in the same terms as those chosen by the provider.

• Menu choices used in automated systems can be long and complicated, often by the time the last option is given, the numbers for the earlier categories are forgotten.

• Systems do not make allowance for the comparative slowness of older people with physical and cognitive impairments and 'time-out' before the menu choices can be made.

• Standards for automated services are not mandatory, and are often not implemented in practice.

• The Australian Telecom Users Group (ATUG) represents banks, business etc, rather than household consumers.

• Regionalisation of services such as Emergency Services and Centrelink mean there are no local numbers, and operators do not have local knowledge. Consumers are not always made aware their call has been diverted to another region, or even another state. This has caused problems such as referral to services with a similar address, in a completely different location. Serious concerns were expressed about the implications of centralised systems in emergency situations when delays can have grave consequences.

Suggested Solutions

• Guidelines/standards on how to implement Automated Telephone Services should be mandatory and should include:
  - clear, straight-forward language,
  - a range of conventions so that if consumers learn how to use one service, e.g. telephone banking, then all other services are uniform,
  - no more than six options in menu.

• If a consumer unable to make a choice before being timed out, then they should automatically be defaulted to an operator.

• Greater emphasis should be put on disability and aging issues when establishing and implementing services e.g. client/user profiles so that time-outs and other difficulties are identified and taken into account.

• Services such as those provided by Australian Communication Exchange should be more widely available and promoted. ACE provides user-friendly relay services which, depending on the user's phone:
  - divert new users to an operator,
  -- can recognise voice, TTY and tones,
  - hearing and voice carry-over systems are flexible and allow for slower users.

• Centralised and diverted services should identify their location, enabling callers to ensure that the operator is aware of their exact geographical location.
EFFICIENCY AND EFFECTIVENESS OF CALL CENTRE SERVICES

The group would like to be able to ring local offices e.g. Centrelink, insurance co.; being forced to ring 1300 no. discriminates against people who have problems visiting office personally. AVR needs longer response intervals (specially difficult when calling the no. for the first time). Also, when you finally reach a human, they are not always helpful: better training for humans is needed.

From summary of Charleville Discussion

Issues

• The efficiency and effectiveness of Call Centres have usually been evaluated from the Providers point of view. As a result consumers needs and wishes are often overlooked, or may even be ignored.

• No account is taken of what it costs in time/business lost to the consumer to be held in queue, and where the required information is not obtained.

• Government and business policies and practices can deny consumer choice
  • Choice is denied when services can only be accessed via the telephone, when there is no face to face alternative available.
  • Some businesses installing TTYs have developed policies not to receive calls through relay services. This means that people without a TTY are unable to access the service when using the Australian Communication Exchange.
  • Where consumers are forced to rely on others to negotiate services on their behalf ,there is a reduction to independence and an increase in the potential for exploitation and abuse of power by relatives, friends or service workers.

Suggested Solutions

• There needs to be a greater recognition by business and government that technology based services cannot meet the needs of all the people, all the time. They should not be the only alternative available to consumers.

• More emphasis needs to be put on aging and disability issues in the design and implementation of call centres, particularly where there is a high and growing proportion of older people in the population being targeted.

• Social practices and how people contact/use telephones need to be considered in the implementation of telephone based services.

• Older people need education in the protocols and conventions of using automated systems to enable them to be less reliant on others in using such systems.

• Systems and access codes need greater standardisation so that skills can be transferred from one service to another.
Computers and Online Technology Issues and Suggested Solutions

My word Nan! I had no idea you were an internet junkie!! Thankyou very much for dropping us a line, and in honour and recognition of your new surfing abilities I hereby crown you TECHNO-NAN!!! INTERNET EXPLORER, QUEEN OF CYBERSPACE, LAWNMOWER WOMAN!!!

Email from grandson to grandmother, quoted by chat group participant

POTENTIAL OF TECHNOLOGY

Participants in Making the Connections identified the potential for the Internet to improve the well being of older people, particularly for older people who are geographically isolated and/or have limited mobility.

We’re sitting in an office at the Centre in Regina, Canada on a Sunday evening talking with you in Australia on a Monday morning! What a great way to be able to share and learn.

Chat Group Guest Speakers Allan Smith, President, Seniors Users Group; and Don King, Director, Seniors Education Centre, University of Regina, Canada

I don’t agree with the statement that older people are merely passive participants. I think that the fact we are using computers is making us already active participants. An example of passive participation is looking at TV. My use of the on-line facilities of my computer gave me the chance to communicate cheaply and in a very fast way, with family and friends at the other side of the world, as well as here locally. E-mail, contact via voice mail, .... gave me a lot of pleasure and useful opportunities.

Bulletin Board Participant

You know if governments would spend more money on preventing people from getting sick then they would spend less on very expensive doctor health.....I think access to the internet is good for the emotional health of older people...I have a lovely man here over 90 who tells me the internet is the reason he gets out of bed in the morning. The only real people he sees are the HACC (Home and Community Care) workers.

Chat Group Participant, Co-ordinator of a Seniors’ Service

We are finding that the placing of computers in retirement complexes is having a number of exiting and not thought of consequences, e.g. learning to use email has brought a number of people into contact with family members and changed their outlook on life. The internet has given them a dimension and encouraged their mental activity which has a marked effect on their physical health.

Member of eLaunceston Project in Chat group

Suggested Solutions

• Seniors are the fastest growing group on the Internet, and can influence the information being made available—technology businesses are only just beginning identifying the older population as an enormous potential market.

• There is something online for everybody. The Internet gives older people the opportunity to participate in communities of interest even when they are geographically distant from each other through email, chat groups, bulletin boards and targeted projects such as U3A Online.
Enormous potential to link people to each other at all levels – locally, regionally, across the state, nation and globally. One suggestion was for carer support networks for people from Non-English speaking background who may be isolated in smaller communities within Australia who could be linked to carer support networks in their country of origin.

_I like the idea of having support chat groups. If say carers groups from all over the world worked together we could have a chat group manned by professional people 24 hours a day._

Chat Group Participant, Co-ordinator of a Seniors’ Service

- Importance of moderated interaction through a reputable organisation when discussion groups may involve the disclosure of personal or sensitive information.
- Potential of chat groups with ‘guest speakers’ to assist in information exchange between geographically remote people as demonstrated by the _Making the Connections_ project.

### ACCESS

**Issues**

- Growing assumption by government and business that information is effectively diffused through placement on the Internet, however equity of access is a significant issue.
- Use of the Internet by older people has tended to be dominated by those with higher levels of education, and those living in larger regional centres and metropolitan areas.
- Public access to computers and the Internet will be an ongoing need in rural areas, one-off funding is not sufficient.
- Quality and problems with the reliability of phone line connections can effectively limit access to the Internet for rural people.
- Dedicated data lines are more reliable, but not readily available in rural areas, particularly services to rural properties.
- Two thirds of population live in the cities. Rural and regional access fees are up to seven times greater than metropolitan charges.
- Small rural communities have either no local access to an Internet Service Provider (ISP) or if they have a local server they have only one option at local call rates-no choice, whereas older people in metropolitan areas have the ability to choose from a range of options.
- Some rural ISPs have only a limited number of lines e.g. only eight lines to the only local ISP for a rural community in northern NSW. Therefore access can be limited during peak periods.
- Low income earners may not even have a telephone, or to only a limited telephone service (e.g. out-going access only to make even emergency phone calls) and are not able to afford the additional costs of Internet access.
- Downturn in economy affecting the income of rural communities (e.g. the average household income in Glen Innes has dropped from $30,000 to $23,000 in last four years). This limits the capacity of rural communities to fully fund public access options, or to take up the cost at the cessation of funding through programs such as _Networking the Nation_, issue of long term sustainability.
- Older people who live in small villages and rural and remote areas, often do not have access to transport to travel into town/regional centre to make use of public access facilities.
- There is public access to the Internet in the Public Libraries in many towns. However, libraries are not always user friendly for those with literacy problems. Not all public libraries provide support, advice and training for people without computer skills.
- Public access provision should take into greater consideration the diversity of lifestyles and needs of older people living in non-metropolitan Australia, for example, people from Non-English speaking background and Aboriginal people.
• Training for technology professionals usually does not include awareness of the special issues for people living outside larger centres in rural and remote areas of Australia.

• Need to provide computer and Internet access to people who are housebound through ill health, disability or caring responsibilities and/or those without access to transport to take them to public access venues.

• Web designers are not consistently applying universal access principles to ensure accessibility to people on low line speeds, with older computers, and/or using assistive technology.

• Participants in Making the Connections saw both potential and risk associated with using e-commerce, and e-banking to purchase goods and services. People in some isolated areas have previously used mail order and are therefore more comfortable with the remote purchase of goods. However, there are concerns about the security and reliability of purchasing goods over the Internet. Security considerations primarily referred to concerns associated with providing financial and credit card details.

**Suggested Solutions**

• Lobby government politicians with responsibility for rural issues to provide funding for seniors computer and online technology initiatives. The rural vote can have an effect.

• Seniors concessions for Internet access.

• Government provide further incentives for the development of local call access initiatives for rural and remote Australia to ensure that people in these areas have greater choice of service provider.

• Extension of local call zones could be expected to assist in extending the range of ISP options available to rural people.

• Improvement of telephone line infrastructure in rural areas.

• Need to promote creative ways of delivering services e.g. take access to the people not people to the access-mobile vans (similar to mobile library services) equipped with computers, mobile trainers in a program similar to Bridgit for women in Queensland. Some groups, for example Aboriginal elders, may be more comfortable learning about computers and online technology in a culturally appropriate environment and/or with the assistance of an indigenous trainer/helper.

• Special Community Internet access initiatives for low income isolated and housebound older people with assistance of government, the corporate sector as well as the general community.

• Use of educational facilities outside school hours for seniors’ computer training.

• Encourage libraries to further develop the potential of the public access points, in partnership with older people in their community.

• Over the last 15 years government funding for health has been channelled toward preventive measures. As a corollary to this current research supports the premise that intellectual activity improves physical health, so funding which gives older people access to technology and opportunity for intellectual stimulation could also be seen as a preventive health measure.

• Funding by government of technology initiatives needs to recognise that some communities may have limited capacity to fund public access, and will require ongoing assistance to ensure that low income older people are not denied access.

• Recycling of used computers by government, the business sector and private individuals for community access projects including seniors computer clubs, and for programs targeting isolated and housebound older people.

• Need for improved awareness and training programs on the needs of older people for generalist technology teachers and other professionals.
EDUCATING OLDER PEOPLE ABOUT COMPUTERS AND THE INTERNET

Issues

• Awareness programs are not enough – there is a difference between awareness about a new technology and the confidence to use that technology.

• Lack of training for older workforce in years prior to retirement is entrenching the knowledge gap between generations, as identified at the 1999 COTA National conference Older Australians: A Working Future. People in the 45+ age group tend to receive less training at work and take this disadvantage into the 3rd age.

• Importance of a non-threatening environment, mentoring and peer support, as demonstrated through a range of seniors programs across Australia e.g. Seniornet, Australian Seniors Computer Clubs Association, Seniors Online, Computer Buddies.

• The role of intergenerational interaction, but also recognition that the young teaching the old is not always a positive experience for older people – can reinforce older people’s feelings of inadequacy when the ‘young’ are impatient or too speedy in their explanations.

• An attitude barrier exists as both trainers and others can have negative preconceptions of older people’s abilities. Older people are seen only as a stereotype – i.e. people needing to be cared for.

• Jargon can present a significant barrier – need for the KISS principle – keep it simple and short.

• It must be assumed that many older people will have some degree of disability, even if these are only small losses of hearing, eyesight and motor skills.

• Computers have potential as means of delivering lifelong learning opportunities for older people in rural communities.

• Finding information on the Internet can be difficult.

Suggested Solutions

• Older workers should be considered equally in the training requirements of staff so that they are better equipped for the increasingly technological society not only in the workforce, but also later, in their retirement.

• Training which includes mentoring and peer support is a more effective learning environment for many older people than top-down instruction from ‘those who know’.

• There are some examples of the successful integration of youth and older people in learning about technology where this is undertaken in a supportive and considered learning environment. For example a project undertaken in Thunder Bay, Canada, involved a ‘mixed-age’ class that integrated older and younger people in learning to use technology together (not the young teaching the older participants) was successful as both a learning activity and in positively enhancing the attitudes of both groups toward each other.

• Trainers, and even some older people themselves, need to discard their negative preconceptions of older people's capabilities and the assumed degenerative effects of ‘old age’. Should think of older people as whole human beings-not concentrate on any perceived frailties.

• Older people must be challenged to achieve despite any disability they may have. The majority of older people can, and should be expected to be capable of learning to use new technologies.

• Assistive technology needs to be an integral component of access initiatives targeting older people, because of the relatively high proportion of people with disabilities including hearing impairment, vision impairment, hand manipulation and mobility restrictions.

• The design and implementation of training initiatives needs to take into consideration the barriers for participation of limited literacy skills. This is a significant issue for a significant proportion of older people in non-metropolitan areas.

• Projects such as U3A Online demonstrate the potential of Online technology to deliver learning opportunities to non-metropolitan older people, but need to be combined with improved computer training, access and peer support initiatives if they are not to be confined in their reach.
• Gateway sites needed to information likely to interest many older people. It was emphasized that older people are not only interested in health related information, but have the same diversity of interests and needs as younger generations.