

Stephenson, Maureen

**Conference Paper**

## The potential of information and communications technologies to overcome problems of peripherality for older people in rural areas

39th Congress of the European Regional Science Association: "Regional Cohesion and Competitiveness in 21st Century Europe", August 23 - 27, 1999, Dublin, Ireland

**Provided in Cooperation with:**

European Regional Science Association (ERSA)

*Suggested Citation:* Stephenson, Maureen (1999) : The potential of information and communications technologies to overcome problems of peripherality for older people in rural areas, 39th Congress of the European Regional Science Association: "Regional Cohesion and Competitiveness in 21st Century Europe", August 23 - 27, 1999, Dublin, Ireland, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/114271>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# **The potential of information and communication technologies to overcome problems of peripherality for older people in rural areas**

Maureen Stephenson, University of Newcastle upon Tyne

## **Introduction**

This paper considers the potential of developments in information and communication technologies (ICTs) to overcome some of the problems faced by older people living in rural areas:

- feelings of isolation, as family members and friends move away or die;
- difficulties of access to educational and cultural opportunities;
- decline in locally based services coupled with a decline in public transport at a time of diminishing personal mobility.

Information drawn from questionnaires, interviews, case studies and source material is used to explore the relationship between old age, rurality and new technology by focusing on:

- current developments in policy and practice in relation to older people;
- the attitude of older people towards ICTs;
- ways in which older people are using ICTs;
- the potential of ICTs to overcome difficulties particularly associated with old age and rural living.

## **Research Context: Old Age, Rurality and New Technology**

Analysis of demographic trends suggests that, as the baby boom generation, born in the late 1950s and early 1960s, enters retirement age, the proportion of older people in the British population will increase dramatically in the early years of the twenty-first century. In 1997, 20% of the population was aged over sixty; in 2010 the proportion will be 25% and by 2025 it will have risen to 33%. This, together with other factors, such as improved life expectancy, the tendency for people to retire earlier and developments in health care, will lead to a situation where there is an increasing number of non-working people at the same time as a decreasing number of people in employment. Given that our pensions and welfare systems are based on the principle that those in work contribute to those in retirement, this has led to fears of a demographic timebomb, a social disaster waiting to

happen. It has also led to an increasing interest in older people.

Old age, rurality and new technology may not seem to have much in common, but, as ICTs are often seen as the solution to many of the problems facing people living in rural areas, including many older people, it is worth considering how they are linked.

One factor which unites older people, rural areas and ICTs is the tendency for them to be stereotyped in such a way that it can be difficult to appreciate the underlying diversity of experience. In contrast to idealised images of old age is the association of ageing with deprivation and poverty, as people become more infirm and increasingly dependent on others. Similarly, images of the rural idyll are often at odds with depictions of rural areas as places of decline and deprivation, as essential services are withdrawn and people become increasingly isolated. Developments in new technology, especially in the field of ICT, are seen on the one hand as a great opportunity to open up new possibilities for the way in which we live and on the other hand are giving rise to concerns about their social consequences.

Just as perceptions of older people either as passive recipients of services or as active agents in control of their own lives determine how society provides for old age, so whether rural areas are perceived as a problem-free, people-free idyll or as places of deprivation and decline will have an effect on the views of policy makers and those in a position to make decisions about services to rural areas, including the provision of an infrastructure which enables maximum benefit from ICT developments. The impact of ICTs is not bland, inevitable or uniform; the benefits are unevenly spread and the effects are mediated by social and cultural circumstances (Silverstone 1996).

It is this issue of the cultural and social influences on the impact of ICTs which is the focus of my investigations. I have chosen to concentrate on older people, as they tend to be overlooked in discussions about ICTs, and to focus on rural areas in particular, because of the current debates about rural services. Research has shown that, of all groups of people living in rural areas, elderly people are the most vulnerable to experiencing poverty and that, partly due to their income level, they are the most vulnerable to social isolation and disadvantage (Shucksmith 1999). It has also been found, however, that rural people's subjective assessment of their poverty or disadvantage is often at odds with objective definitions. Cloke et al (1994) claimed that much investigation into rural issues is bogged down by the assumption that service provision is paramount and stressed the need to take into account the more symbolic aspects of social and cultural life. Also of importance is the effect of the stereotypical image of old age, as a time of decline and increasing dependence, not only on how service providers view older people, but also on how older people view their own capabilities.

Those who see new technology as a contributory factor towards the decline of services will not necessarily see it as a way of overcoming that decline. Research carried out by Microsoft (1999) found that, although older people recognise the benefits of computers and the Internet, they do not associate those benefits with their needs. Studies I have

carried out amongst older people living in rural Northumberland show a great concern about transport and mobility problems, diminishing services and difficulties in accessing cultural and educational activities, but developments in new technology are seen more often as a cause of diminishing services in rural areas than as a way of overcoming some of the resulting problems.

### **Current Developments and Policy Issues**

In a speech at the launch of the 1999 United Nations International Year of Older Persons in October 1998, the Director of Microsoft Senior Initiative, reported:

*This past month, Microsoft and NCOA concluded a grant program focusing on PC literacy. During the grant application review process, more than 400 community-based organisations astonished us with the level of interest, creativity and ingenuity they exhibited in submitting their ideas for providing seniors with access to technology and PC literacy training. We learned that a significant percentage of non-profit organisations working with seniors are re-inventing themselves, integrating technology in their operations and service offerings. While many of these organisations were once focused on programs such as meals on wheels, there is now an increasing demand also to offer computer literacy and job skills programs. These organisations, too, recognise the potential that the use of technology has in allowing seniors to realise exciting possibilities and that these possibilities will ultimately benefit multiple generations, a community and all of society. (Spiezle 1998)*

This extract reflects what is happening in Britain as well. Organisations concerned with older people, such as Age Concern and Help the Aged, which have traditionally provided services for the elderly and have been using the Internet for some time to transmit information about their services, report increasing demand from older people for opportunities to learn how to use computers and have access to the Internet. Age Concern, wanting to change the image of old age as a time of dependence to a time of opportunity, have recently been setting up Age Resource Centres to provide older people with information about the range of activities they can become involved in. In response to demand, they are now providing Internet access on a drop-in basis and providing training in the use of computers for their volunteers.

Universities of the Third Age (U3As) are educational self-help groups, in which older people come together to share their knowledge and expertise. They have been established in many parts of the world, including the U.K., and are open to everyone in the third age, which is defined in the Carnegie Report (1993) as 'the period of life when people emerge from the imperative of earning a living and or bringing up children and, without precedent in our society, are able to look forward to perhaps twenty or more years of healthy life'. The network of British U3As, founded in 1981, is based on the principle that 'the university shall consist of a body of persons who undertake to learn and to help others to learn. Those who teach shall also learn and those who learn shall also teach', (Midwinter

1996). The British U3A website has a relatively small but growing number of contributors to its discussion groups, many of them reporting an increasing number of computer groups being formed in local U3As and exchanging ideas of how computers are being used.

Two important developments in the U.K., which are likely to encourage greater use of ICTs amongst older people, are the Millenium Debate of the Age and the government's Better Government for Older People initiative. The Debate of the Age, which is being co-ordinated by a Secretariat initiated by Age Concern, is designed to offer the opportunity to understand how demographic change is affecting everyone's lives and to give people, whatever their age, the chance to have their say about how life in the U.K. will look in the 21st Century, especially for older people. The aim is to produce an Agenda for the Age, to be presented to the government in the year 2000. Among topics for debate is the role of new technologies in all aspects of individual and community life and, throughout the two-year period, full use will be made of ICTs to ensure the involvement of as many people as possible. There is a dedicated website which will become 'the world's leading Internet debating forum' (Debate of the Age publicity brochure) and a wide range of activities, including TV chat shows, radio phone-ins, conferences and seminars, some using video-conferencing facilities.

Better Government for Older People is a government-funded scheme, announced in June 1998, for twenty-eight local authorities to carry out a two-year project 'to improve public services for older people by better meeting their needs and encouraging and recognising their contribution'. In the projects chosen to receive funding, there was a strong emphasis on education, innovation and information technology. A more recent development is a series of ten 'Listening Events' being held throughout the UK during 1999, which recognises the need for consultation and involvement with older people in informing the Government's programme for modernising public services. Among topics to be considered at the events are:

- the future of learning (including distance learning), using ICTs as well as traditional methods of learning;
- ways in which new ideas and technology can best be practised and shared in the community, and the involvement of older people acknowledged when developing policies and practices.

It is clear that the use of ICTs by older people is currently a growing area of interest to policy makers and organisations concerned with older people.

### **How Older People are using Computers**

My initial research into why older people want to learn about computers suggests four main reasons: curiosity, i.e. wanting to know what all the fuss is about; wanting to keep up with children and grandchildren; wanting to gain the confidence to use a computer; wanting to find out if it is worth buying their own computer. It is only after the first hurdle of becoming familiar with the machine that the other possibilities open up, such as

using the Internet to communicate with distant relatives and friends or to track down information about specific topics. Older people's reluctance to use new technologies is often attributed to the widespread belief that, as people grow older, their capacity for learning diminishes, an assumption that has been refuted by studies of older learners (Glendinning 1997; Carnegie 1993). An important factor is the time involved in learning new skills. As people grow older, they are very aware of time running out, and so the time taken to master the basics can be a strong deterrent to persisting with learning about what computers can do, especially when people lead active lives and time is precious.

Perhaps because of the time factor, older users tend to have very specific reasons for using computer applications or the Internet, often in connection with other interests, e.g. the man who is interested in genealogy who has discovered how computer software and access to the Internet can enhance his interest; the woman who belongs to Amnesty International, who originally felt that wordprocessing would improve the appearance of her correspondence and now finds the Internet invaluable for making contacts and keeping up with developments; the woman who belongs to several clubs and societies who wants to be able to print address labels; the man who wants to extend his interest in photography to digital photography and the possibilities offered by the ability to scan his photographs into other media. The favourite activity amongst computer-using members of the Association of Retired Persons and Age Concern is swapping emails with family messages and photographs, with visiting medical websites coming a close second (Ezard 1998).

Although the number of older people in Britain who own and use computers is relatively small, organisations concerned with older people report an increase in interest and demand for the opportunity to learn more about what computing has to offer. The U3A, which has self help groups on a great many subjects, has an increasing number of computer groups. One such group in Northumberland particularly welcomes the opportunity of learning together in a supportive environment, where they can work at their own pace on aspects of computing of interest to them individually, without feeling embarrassed about making fools of themselves, something which they feel would not be the case in a formal class. My own research, in common with other studies (Walker 1998), shows the importance given by older learners to the social aspects of learning with like-minded people. Many older people express a fear of computers, which appears to be a fear of pressing the wrong button, of not knowing what to do when something goes wrong and, worst of all, doing something stupid which wipes out the entire program or damages a very expensive machine. Being able to learn at one's own pace, in the company of other people who have similar concerns, and having someone on hand to help are, therefore, particularly important in the case of computing.

Amongst all the discussion about computers and ICTs, it is only too easy to forget that the vast majority of older people have never used a computer in their lives and that many of them do not have a telephone. The world of faxes, emails and the Internet, with its strange language of initials, dots and abbreviations is completely foreign to them. As one elderly woman put it, "It's like being a stranger in your own land". Of fifty respondents to a questionnaire, in which I asked older people about their leisure and learning activities,

only two expressed an interest in computers. Further discussion with the groups found that people were generally dismissive of new technologies, with comments such as, *'I'm too old'*, *'Computers are alright for the young ones'*, *'I haven't the time'*, *'I can't be bothered with all that'* and, in the case of 'hole-in-the-wall' machines, *'I can't use those things'*, and *'You can't talk to a machine. I like to have a chat'*. This desire for contact with other people, as well as an awareness of the value of time, is evident in most of my discussions with older people and figures prominently in other studies (RDC 1996; Talbot 1998).

### **The Potential of ICTs to overcome Problems of Peripherality**

This section describes some of the ways in which older people are using ICTs to overcome isolation, problems with obtaining information and difficulties in accessing educational and cultural activities.

One of the interesting aspects of the U3A's online discussions is the number of contributors from other countries. Members share information about activities within their local groups and contribute to debates of common interest, both nationally and globally. There is much evidence of individuals putting out general requests for advice on the best places to go on holiday or information about specific locations and ending up going to stay with U3A members in the other country. With reference to the power of the Internet to disrupt physical frontiers, Nicky Gardner of the Higher Education Joint Information Systems Committee is reported to have said, 'Global communities of interest will begin to take precedence over geographical communities', (Guardian Online 26.3.98). This is certainly beginning to happen with the U3A.

SeniorNet (U.S.A.) was begun in 1986 and grew out of a research project funded by the Markle Foundation to determine whether computers and telecommunications could enhance the lives of older adults. It is a nationwide organisation based in San Francisco, with a mission to provide older adults with education for and access to computer technology to enhance their lives and enable them to share their knowledge and wisdom. SeniorNet has over 30,000 members, publishes a quarterly newsletter and a variety of instructional materials, has over 140 Learning Centres throughout the U.S.A., offers discounts on computer-related and other products and services, holds national and regional conferences and collaborates in research on older adults and technology. Discussion groups on its website are open to all older people, whether members or not. Membership opens up the possibility of learning and teaching others to use computers and ICTs to accomplish a variety of tasks, from wordprocessing letters to desktop publishing newsletters and autobiographies, managing personal and financial records and communicating with others across the country and throughout the world. SeniorNet is funded by membership subscriptions, Learning Centre fees, individual donations and sponsorship from a number of companies and foundations. At the time of writing (June 1999), the organisation was looking into the possibility of extending its educational programme to include online courses for those unable to attend Learning Centres and had

published on its website a detailed questionnaire to find out what sorts of courses people would welcome and how much they would be willing to pay for them.

U3A Online (Australia), which was launched in February 1999, is the outcome of an initiative of a group of U3A members in Australia, aided by colleagues from New Zealand and the U.K. It is being funded by the Australian Government as a project for the 1999 United Nations International Year of Older Persons and has as its centrepiece an Internet program called Isolated Bytes, which has been devised to allow older members of the community who are isolated, either geographically or through physical or social circumstances, to enjoy some of the advantages of membership of an ordinary U3A. The program will enable people to undertake online courses and communicate via email and other media with their course leaders, thus enjoying at least some of the interactive learning which is such an important feature of U3As. As with SeniorNet, the website will also be a source of information and up-to-date news of relevance to older people, as well as a forum for the exchange of ideas.

As early as 1986, in association with the U3A, a project called Chatback was set up to provide an email facility for linking schools (mainly special schools) in the U.K and many other countries, so that young people could involve older people in their project work and communicate with each other for both social interaction and work on classroom subjects. Chatback is still actively promoting this intergenerational dialogue and is at present taking part in an international research study to establish the increase in linguistic competence and self esteem of children involved in the project.

The intergenerational aspect of older people's use of new technologies is a recurrent theme. Reasons given by older people for wanting to learn about computers often have to do with keeping up with the grandchildren, wanting to know what the younger generation are talking about and, in the case of the Internet, communicating with distant children and grandchildren. There are many reports of joint ventures, in which young people teach older people how to use computers. A Northumberland High School won an award from Barclay's New Futures scheme to set up a project in which sixth form students introduced older people to computer skills. As part of its Shaping Our Future Together initiative, Northern Infomatics and BT organised an event in the Gateshead MetroCentre, in which school children were on hand to help passers-by to surf the net, witness video-conferencing, access email facilities and download digital pictures of themselves. One 80 year old woman is reported as having said, 'I've never used a computer in my life, let alone go on the Internet, but it's really interesting and not as difficult as I thought. I wish my husband could see me now.' (Network North April 1998)



## **ICTs in a Rural Context**

People in rural areas accept the fact that they will have to travel to access many services and it has been found that the key factor in satisfaction with service provision is private car ownership (Shucksmith 1999). As people grow older, transport difficulties increase and car ownership becomes irrelevant; owning a car and having a licence are not synonymous with driving, as many older people choose not to use their cars. Amongst people over 65 who live on their own, almost 90% of women and two-thirds of men do not have access to a car (Carnegie 1993).

It is easy to assume that lack of access to local services can be compensated for by the provision of alternatives, such as mobile facilities, computer terminals in village halls or Internet services, but people's use of these alternatives has to be taken into account. Uptake of benefits tends to be low in rural areas, partly due to people not wanting everyone else in their small community to know about their circumstances. The problem is exacerbated if people are expected to visit a mobile benefits bus or CAB caravan, usually parked in a central and conspicuous location. Reluctance to use these outreach services can be perceived as lack of demand and in turn lead to further cuts (Talbot 1998).

The establishment of on-line public information points in locally accessible places assumes a level of confidence in using them which the majority of older people do not have. New technology projects, such as Peritec in rural Northumberland, which takes computer training and supported access to fax, Internet and photocopying facilities into village halls for at least a year, do attract older users who want to learn about computers, but this is very different from casual use of information points. As for putting services on the Internet, this again assumes that people will be able to access either community-based computers or their own and does not take account of social factors. When asked about Internet shopping, for example, people in one isolated Northumberland community pointed out how much they appreciated their trips out to the nearest town (Talbot 1998).

Although the number of people using the Internet is increasing rapidly all the time, age is likely to remain one of the major determinants of usage. Of the 8 million people using the Internet last year (Which 1998), only one in twenty was aged over 55 and that proportion represented only 2% of all people over 55 in the population as a whole. The number of people who said they never intended to go on-line increases dramatically with age, with 85% of those over 55 saying they will never be connected, compared with 61% of the general population. A determining factor for people with a limited budget is the cost of buying the extra equipment, the costs of accessing the Internet (although the appearance of an increasing number offers of free access is altering this situation) and the telephone charges involved. The Which survey also revealed an unexpected fear and concern amongst people about the effects of the Internet on their everyday lives.

An example of how effective distribution of information about care services can be enhanced by new technology is the South Shropshire Care Information Project (RDC 1996). Information which is held and regularly updated on a database is circulated to care

professionals and voluntary groups, who work with a network of village volunteers responsible for maintaining information racks in village locations. A development of the project is to transfer information on to floppy discs for use on home computers and to organise information sessions in the villages, using lap-top computers to demonstrate and update the database. The main way of gaining information is, therefore, through the human interaction which people value, with new technologies being used as a way of organising and distributing that information.

The majority of the case studies outlined in the RDC publication (1996) show the importance placed by older people on meeting other people, having someone to talk to and, if possible, getting out of the house.

*I have a lovely driver! He comes for me every week and I really enjoy the journey and chat we have on the way. (91 year old woman, Warwickshire)*

*The club's very helpful. People can get very low if they are isolated. In the past, Dales farmers had large families and there was always someone to talk to. That isn't so any more. (71 year old man, Yorkshire)*

In this respect, older people living in isolation in rural areas are no different from the many home-based teleworkers, who have discovered the disadvantages of what seemed an ideal solution to a rural problem.

## **Conclusion**

It is clear that we cannot make easy assumptions that developments in new technologies will be able to overcome many of the problems experienced by older people living in rural areas. In my research I will be investigating these issues through a variety of research methods, including the involvement of older people as active researchers, following the study circles model. As Silverstone (1996) stated, the use of new technology depends on many factors, including access, competence and desire and is influenced by gender, age, class and culture. We need to be aware that social change is dependent on how we use technology, rather than on the technology itself.

## References

- Carnegie Inquiry into the Third Age (1993) *Life, Work and Livelihood in the Third Age*. The Carnegie United Kingdom Trust, Dunfermline.
- Cloke, P., Milbourne, P. and Thomas, C. (1994) *Lifestyles in Rural England*. Rural Development Commission.
- Ezard, J. (1998) 'Surfing the Net holds no fear for oldies', *Guardian Newspaper* 21.11.98.
- Glendinning, F. (1997) 'Learning in the Third Age', *Ageing & Society* 17 (1).
- Microsoft (1999): Research project carried out by Microsoft and the American Society on Aging. <http://www.microsoft.com./seniors/content/Pr99/ASAresearchpr.asp>
- Midwinter, E. (1996) *Thriving People: The Growth and Prospects of the U3A in the U.K.* University of the Third Age, London.
- Rural Development Commission (1996) *Growing Old in the Countryside: a Case Study Practice Manual*.
- Shucksmith, M. with Philip, L. (1999) *Social Exclusion in Rural Areas: a literature review and conceptual framework*. Arkelton Centre for Rural Development Research, University of Aberdeen. [www.addn.ac.uk/arkelton](http://www.addn.ac.uk/arkelton)
- Silverstone, R. (1996) 'Future Imperfect: Information and Communication Technologies in Everyday Life', in Dutton, W.H. (ed) *Information and Communication Technologies: Visions and Realities*, Oxford, Oxford University Press.
- Spiegle, C.D. (1998) 'Longevity and Technology: the Impact to Community and Community Based Organizations'.  
[http://www.microsoft.com/seniors/content/speeches98/un\\_speech.asp](http://www.microsoft.com/seniors/content/speeches98/un_speech.asp)
- Talbot, H. (1998) *Information Needs of Rural Communities*, Centre for Rural Economy, Newcastle University.
- Walker, J. (1998) 'Mapping the Learning of Older Adults', *Adults Learning* 10 (2).
- Which (1998): Annual Internet Survey.  
<http://www.which.net/nonsub/special/ispsurvey/executive.html>

## Websites

- SeniorNet: <http://www.seniornet.org/>  
U3A Online: <http://www.u3aonline.org.au/>  
U3A (U.K.): <http://u3a.org.uk>

## **Biographical Note**

Maureen Stephenson has spent most of her working life in Adult and Community Education. She is a part time post graduate student in the Centre for Rural Economy at the University of Newcastle upon Tyne researching the effects of ICTs on the lives of older people in rural areas.