

Technology and the over 65s? - Get a life

Richard Swindell - Griffith University

Many people have been marginalised by the rapid rate of technological change during the past two decades. In all probability the majority of readers of Social Alternatives currently experience some level of stress as they struggle to keep up with technological developments that are affecting both their working and leisure lives. Most of us probably know of colleagues, or former colleagues in the work force, who have decided that the effort of adapting to technology-driven new work practices is not worth the angst, and have opted for early retirement.

Desk top computers became commonplace in the work force in the early 1980s. These were quickly followed by computer-related developments like faxes, and voice mail. Most of us were required to rapidly adopt new work patterns as secretarial and other specialised assistance was removed from the workplace. We found ourselves embracing the management mantra of multi skilling. Word processing, spreadsheets, databases and other computer packages designed to improve productivity are now routine tools of the trade for the great majority of office-based workers in developed countries. Most recently we have begun to adjust to a barrage of Internet-related developments like e-mail and services such as e-banking and e-shopping. Indeed, many readers are probably reconciled to the notion that they will have to continue the struggle to keep up with new communications developments for at least the remainder of their working lives.

But keeping up until the end of our working lives is not the end of the story. In fact it is only the beginning of this story. How many of us are aware that when we end our Second Age (the age of paid work and parental responsibilities), we enter a relatively long Third Age? The Third Age may be defined as the age of leisure and self-fulfillment preceding the Fourth Age, which is usually a brief period of decrepitude and dependency prior to death. For many retired people the ideal of a happy and productive Third Age is a reality. However, it is also a reality that is accompanied by a number of "hazards" that will be discussed shortly. For the moment let us consider the situation of a hypothetical worker who has continued to cope with the changing work face, has avoided being "down-sized" and has reached his/her goal of retiring from the paid work force by age 65. Furthermore, let us suppose that our worker has reached retiring age in good health, has quit smoking years ago, has moderated his/her penchant for the demon drink, has continued to exercise sensibly and has minimized the amount of fat, salt and junk food in the diet. Having reached age 65 under the above conditions then it is quite probable that our hypothetical worker will continue to live in quite good health to at least 85 years of age if male, and to at least 90 years of age if female.

What happened to the old three score and ten life span adage? Particularly during the latter part of the twentieth century the average life span has risen quite sharply to the current level of about three score and fifteen years, and it continues to rise. But an

average age of 75 is at least ten years less than we were considering for our hypothetical worker. Why the difference? Three score and fifteen years is the average life span from birth, not from age 65 when our hypothetical worker retired. The closer we are to the "dead end" of the scale the more likely it is that we will live to a ripe old age. In fact, the 80 years and older age group comprises the fastest growing sector in the population. Consequently, readers of Social Alternatives should be thinking in terms of managing a life lasting for a good twenty or more years into the Third Age.

Australia, like all developed countries, has become an ageing society. With the shameful exception of our indigenous people most of us can now expect to live a comparatively healthy and comfortable old age. Life in the Third Age is enjoyable and fulfilling for those who are prepared to make the most of the opportunities, particularly if they are fortunate enough to retain the three main requisites for a high quality of life. These are, sufficient money to maintain a reasonable standard of living, good health and a network of close friends.

Health hazards in the Third Age

Old machines wear out. So too do old bodies, regardless of how well they've been looked after during early life. By the time our hypothetical retiree has reached the age of 65 s/he will probably have become a statistic of fair "wear and tear" and is likely to require some form of health-related assistance. The Australian Bureau of Statistics (1993) reports that disability increases rapidly with age beyond the age of 65. By age 65 approximately 56% of the population has some form of disability, chiefly arthritis, circulatory disease and hearing loss. Keeping ageing bodies functioning effectively is a costly business. Currently, about one third of the nation's total health expenditure relates to the 65 and older age group. As the baby boomers and their children reach retirement age the 65 and older population is expected to double from its present level of about 12% of the total population to more than 24% by the year 2051.

The above statistics are not cited with any suggestion of gloom and doom, in fact quite the contrary. They are a sign that our society is coming of age as a truly developed society. Our ageing society is the pay off for the countless billions of tax payer dollars that have been spent on medical and technological advances, as well as on education and other social services, which have reduced or entirely eliminated many former life threatening circumstances. The really important statistic is that most older people, even those in the old-old category of 75 and older, rate their health as good or excellent. How can this be when more than half the population 10 years younger report some form of disability? This seemingly anomalous finding is because older people rate functional independence as the main criterion by which they judge their health. In other words, as long as individuals feel that they are in control of their lives and have what they perceive to be a satisfactory quality of life, then they feel that they can cope readily with health-related problems. Thus, every effort must be made to help provide a range of opportunities for older people to maintain their quality of life.

Recent research appears to suggest that one of the very useful things that older people can do to help maintain their health is to take part in cognitively stimulating activities. For example, Schaie (1993) reported that in cases where intellectual decline had been

found, it is possible through carefully planned instruction to reverse the process. Others have observed clinical evidence of an association between higher educational attainment and reduced risk of dementia (Glatt et al., 1996), suggesting that a stimulating environment has positive effects on cerebral health and may provide some resilience to damage. Young and colleagues (1999) demonstrated in their study on rats that a complex, enriched environment stimulated new cell growth and prevented cell death in the hippocampus. They speculated that similar positive findings, which have come from experiments with mice, tree shrews and non-human primates, might apply to all mammals, including humans.

The association between cognitively challenging activity and aspects of good health in older humans may be difficult to definitively establish. However, it seems reasonable to speculate that older adults, who continue to engage in intellectually challenging activities, will be better equipped to cope with the exigencies of ageing than those who simply give up. Unfortunately, in later life, many older people face a range of physical and psycho-social constraints that may make it extremely difficult to continue to participate in stimulating activities.

One of the most important quality of life issues for older people is the quality (as opposed to quantity) of their social networks. The relationship between older person's social networks and well being has been well documented during the past two decades (Bowling, 1994). Indeed social isolation has been reported by some researchers to be as great a risk to health as smoking (House et al., 1989). Apart from direct health-related constraints however, there are other age-related hazards that jeopardise social networks. For example, a retired couple may decide that the climate of the Gold Coast is far more appealing than the rigours of a southern winter. They move, then the husband dies early, and the wife is isolated with no nearby friends of her own. Divorce in later life is another relatively common cause of social isolation. The children have left home, the husband has retired with no sound notion of how to constructively spend his leisure time and the couple decides to go their separate ways. At a more mechanical level many older people give up driving and become isolated from activities because public transport is not readily available, or is difficult to use. Others, particularly women, may be thrust into the role of caregivers for ailing spouses or friends, or for grandchildren whose parents must work. Death of a close friend also becomes an increasingly likely event.

Social isolation in later life is a very real hazard for older Australians. The average second ager spends about 3 hours alone each day. In contrast men aged 65 and over who are living alone, spend 12 hours a day alone, or about 83% of their waking lives. Older women living alone are not much better off. They spend about 78% of their waking lives alone (ABS 1999). Thus, a wide range of isolating factors in the Third Age can jeopardise not only the immediate social network but also places serious limitations on other positive health related leisure pursuits, such as the ability to take part in cognitively challenging activities. Perhaps new communications technologies can help to minimise some of these hazards.

Older people and new communications technologies

In recent years a number of researchers have begun to investigate the suitability of the Internet for reaching out to isolated people. For example, some studies have

highlighted the potential of the Internet to create meaningful social interaction (Komito, 1998). Ito and colleagues (1999) completed an ethnographic study of older people who are regular users of SeniorNet in the USA and reported positively on the medium's potential for social interaction and individual empowerment. By contrast, Kraut and colleagues (1998) raised a cautionary note. In their longitudinal study of 169 adult Internet users they observed declines in everyday household communications, declines in the size of social circles, and increases in depression and loneliness.

Despite Kraut and colleagues' (1998) caution however, discussion of the hazards confronting third agers suggests that many older people do not have a wide range of options to choose from when it comes to reestablishing or maintaining their social networks. Many people who live alone are confronted by a daunting array of constraints that militate against their ability to take part in personally rewarding activities like adult education programs that can promote cognitive development within a socially stimulating milieu.

Isolated and lonely older people are not averse to experimenting with new technology in order to join in adult education programs that have the potential to enrich, and even change their lives. For example, Swindell and Mayhew (1996) showed that frail elderly people with sound minds, who were confined to their homes by illness or incapacity, gained measurable benefits from educational programs delivered by teleconference. Moreover, several of the participants developed new social networks as a result of interacting with like-minded others in their teleconferencing groups. The educational program was the catalyst that induced them to experiment with new methods of communicating and exploring beyond their physically constrained horizons.

Potentially, the Internet is a much more flexible tool than any other communication technology for meeting the educational needs of isolated older people. The Internet is becoming increasingly easy for novices to use, information can be exchanged quickly, often in real-time and, once the technology is in place, it is quite inexpensive to use. Most importantly for educational purposes however, users can access the information and communicate with others when and if they want to, rather than being captive to a course leader's timetable and agenda.

All this is well and good but earlier we discussed problems of keeping up with new technology during the Second Age. Are third agers really interested in playing around with new machines that played no part in their earlier lives? Unfortunately, little baseline data are available in Australia. However, there is a wealth of current statistical data available about older Americans' use of new communications technology, and the answer is a resounding "yes". In 1998, 40% of all US adults aged 50 years and above had a home computer. Of these 70%, or more than 13 million older "surfers", regularly used the Internet. Internet growth is so rapid however that statistics are virtually outdated the moment they have been collected, let alone published. In the year 2000, women over the age of 55 comprised the fastest growing group on the Internet. This was a 98% increase over the 1999 figure. (For reference, teenagers were the second fastest growing group on the Internet, showing an 80% increase over the 1999 statistics.) The principal motivation for older Americans to switch on to the Internet is to keep in close communication by email with their

children and grand children. Other major uses are to take control over their finances, monitor their health, leisure and shopping. There is no reason to doubt that older Australians are, or will be, similarly motivated to turn to the Internet in order to improve their quality of life.

The educational use of the Internet for older people is in its infancy. To date, very little has been published about older person's learning on the Internet. A number of interesting and innovative programs have been described but almost all of these have involved courses on how to teach older people to use the Internet. The next step is to develop studies that begin to illuminate the characteristics and aspirations of older people who are prepared to use the Internet in order to become members of an electronic community of learners. The remainder of this paper focuses on one such study.

Isolated Bytes

Isolated Bytes (IB) is a program begun in 1998 by a small group of Australian University of the Third Age (U3A) enthusiasts, with assistance from U3A colleagues in New Zealand and the United Kingdom. In essence, IB is a virtual U3A for isolated older people. IB course leaders volunteer to write and teach courses in their specialist areas, just as conventional U3A course leaders do. The major difference is that all teaching and interaction takes place via the Internet. Few U3A members have the skills needed to electronically develop the courses therefore this expensive task is handled professionally. Funds to develop the IB concept were provided initially by the Australian government as part of its celebrations for the International Year of Older Persons and, subsequently, by the Office for Older Australians.

There are two main categories of IB membership. The first is for older people from any country who consider themselves to be isolated by distance, poor health or other circumstances. This category can interact with the course leader when courses are offered. An annual fee of \$33, which is approximately the average membership fee for Australian U3A groups, is the only charge for course participation for the isolated group. The second category is for U3A members who already belong to a U3A group but would like to use the course materials for independent study. They do not have direct contact with a course leader. The annual membership fee is \$11 for this category. Would-be members of IB join by logging on to the U3AOnline homepage at <http://u3aonline.edna.edu.au/>

To test the effectiveness of the IB concept, two exemplar courses were written and comprehensively evaluated. Each of the 8-week long courses was of a distinctly different nature. One course, entitled Botany for Knowledge and Enjoyment, was strongly content-based, similar in nature to an electronic text. Participants in that course were invited to interact with their tutor and with each other by electronic Forum and e-mail, as the need arose. The second course, Writing Family History, was very interactive. Participants were introduced to the basics of creative writing and asked to post a minimum of three 300 or 400-word stories to the Forums where the tutor and other members could read and comment on these. This style of course required participants to be active rather than passive learners.

Each of the courses was heavily oversubscribed. Course tutors placed a limit on

participant numbers (botany 20, writing 14) based primarily on their perceptions of the amount of time needed to interact with students. As a prerequisite for course selection, participants agreed to provide quantitative and qualitative evaluation data about their perceptions of learning via the Internet. Twenty-nine participants (85%) completed the eight-week course and responded to the pre and post course questionnaires and a mid-course telephone survey.

Some findings from the IB study

Seventy-two per cent of the participants were women and about two-thirds of these were aged over 65. Initially, it was assumed that IB would attract a majority of members who live in small communities or homesteads that are an appreciable distance from adult education organisations. However, more than half of the course participants lived in cities with populations greater than 20,000. Most of the remainder lived in small or medium sized towns. Only two of the participants were from regions that were geographically isolated.

The following statements give some sense of participants' perceptions of isolation.

"I live in [the suburb of large city] with bad bus service. I do not have a car or use taxis. Have no family support. Have become more disabled and in constant pain over the past couple of years".

"I care for my wife who has Alzheimers. Have done so for the last 8 years".

"I live in a rural community. Nearest U3A is 139 km away. Carer for husband. Limited access to [adult education provider] 30 km [away]".

"I live in [a large city]. Because I never know how I am going to feel from day to day [my health] stops me committing myself to a set routine like going to class".

"Nowadays, living alone and physically limited, I was being stupefied by knitting, crochet, patchwork, computer puzzles, reading, letter writing and occasional bus trips. There is a limit!"

These findings underscore an important aspect of ageing, namely that many older people, even those who live in large cities, experience a sense of isolation that often is not recognised by the majority of the community. It would appear that programs like IB have the potential to make an important contribution to the well-being of older Australians, many of whom experience an increasing sense of isolation with age, despite their living in seemingly well serviced and well resourced communities.

As anticipated, the majority of participants (80%) had completed high school or better and were clearly from a more advantaged educational background than the average older Australian. However, the remaining one-fifth had minimal formal education backgrounds, having completed only primary school or one or two years high school. These, along with the majority of people who are likely to be attracted by programs

like IB for the next few years, would have experienced their compulsory schooling during post Great Depression and World War 2 days. For many children of that era compulsory education concluded at primary school. This suggests that programs like IB may prove attractive to older people who were denied the opportunity in earlier life to continue with their education.

One of the objectives of the IB project is to foster communication between the isolated course participants. Three-quarters of the participants used a variety of electronic methods to communicate with each other, mainly by e-mail and discussion areas associated with the courses. However, seven participants, all from the factually oriented botany course, preferred to remain passive learners and did not communicate with either their tutor or other course members. All rated their learning experience highly.

Ongoing developments

The success of the IB pilot program suggests that well-crafted adult education programs delivered by the Internet have the potential to enrich the lives of isolated older people. Although the sample was small and self-selecting, the evaluation showed that participants benefited from the venture and most of them enjoyed interacting with like-minded strangers, via cyberspace. One participant wrote: "many thanks to you for my being able to enjoy what has turned out to be the most pleasurable weeks of my life".

The next step in the learning curve will be to determine whether the findings from the pilot study are applicable to a wider ageing population. For example, a large majority of participants in conventional face-to-face Australian U3A groups are women. Similarly, the majority of participants in the IB pilot study were women, mostly in the older age range. Perhaps the self-paced, private setting in which IB courses are run might be a model of the kind of environment that can attract older women who would like to come to grips with Internet technology but do not want to do so in more public surroundings. It would appear that the flexibility of the medium allows participants to retain whatever level of privacy they need yet also permits very considerable interpersonal interaction to take place. The latter points to the real possibility of isolated older people developing meaningful social networks that might otherwise be denied them.

Since the two pilot courses were developed the range of courses has grown to include:

- Design in your life;
- Life and times of Henry Lawson;
- Astronomy;
- Comparative religions;
- Continents in motion;
- Genealogy;
- The frozen continent;
- History of English language;
- Botanical identification;
- The Romans; and,
- Healthy ageing.

Each of the courses runs for eight weeks and, as is the case with face-to-face U3A courses there are no entrance requirements (other than self-perceived isolation), no awards and no exams. Learning is purely for the love of learning and, hopefully, also for the social stimulus of interacting with like-minded strangers via cyberspace.

A novel feature of the course, Design in your life, is that the writer/tutor is a U3A member living in the UK. She runs the course from the UK and her participants are isolated older people from England, America, New Zealand and Australia, illustrating the potential of a U3A without walls to provide expertise from anywhere in the world, to isolated older people anywhere in the world.

Conclusion

If we are fortunate we will join most of our friends and colleagues in growing older (it certainly beats the alternative). In the process of growing in the Third Age we will inevitably encounter a range of experiences, many of them enjoyable, some of them not so. The secret of successful ageing is to maximise the opportunities for enjoyment and personal growth and to learn to work through the negatives and attempt to minimise their long-term impact. There are no hard and fast rules for preparing to manage the exigencies of ageing because each of us is different. However, a general guideline that might assist is to bear in mind the three main contributors to a satisfactory quality of life - sufficient money to maintain a reasonable standard of living, good health and a network of close friends.

Usually, not much can be done directly about the first of these once the Third Age is reached - our future level of fixed income is usually reasonably well known by the time we retire from paid work. However, research suggests that third agers may be able to intervene in delaying or minimising some of the financially and emotionally draining consequences of poor health, if such is "predestined". Certainly the beneficial effects of sensible exercise and diet in the Third Age appear to be beyond question. Similarly, the importance of maintaining social networks is now well accepted. Less well established but nevertheless intriguing, are the health benefits associated with continuing to challenge the intellect throughout later life. What is probably not speculative is that those who continue to challenge their intellects will be better prepared to navigate their way through the hazards of ageing than those who simply give up trying.

For the first time new technology in the form of the Internet appears to offer individuals in their Third Age a new set of options for improving their quality of life. Whether they are isolated or not older people can develop new friendships in cyberspace and, individually or in cybergroups, discover seemingly unlimited ways to challenge their intellects. They can visit museums in cyberspace, they can freely read the world's great newspapers, they can obtain literature from large libraries here or overseas, they can watch personal videos or listen to audio files that their children or grandchildren have sent as attachments to e-mails from home. When the rheumatism is playing up in the early morning hours they can while away the time at free game sites like chess, bridge, rickety-kate, hearts or numerous other interactive games that can be played live with thousands of others who are playing online at any given time of the day or night. They can subscribe to free medical sites and learn all that is known about their affliction or ailment and discuss appropriate health management

regimes with their GPs. They can join any of numerous Internet chat groups and discuss a range of interests with like-minded individuals anywhere in cyberspace. In fact, the possibilities for unlimited personal development and enjoyment appear to be within the reach of every technologically adroit retired person.

A major focus of this paper has been devoted to the realities of ageing. Few second agers dwell upon their retirement. Somehow, retirement is something that happens to someone else. However, regardless of how well or how poorly we have prepared for retirement, we are all likely to encounter a range of unexpected and personally challenging circumstances throughout a lengthy Third Age. New communications technologies have opened up a whole new ball game for citizens of developed countries. Who knows where these developments will lead to next? The burgeoning growth in Internet usage by the over 55 age group in the USA suggests that new technology is not some passing new age hula-hoop that older people will quickly tire of. Rather, it is a medium that provides them with hitherto unrecognised opportunities for retaining control of their lives. Technology and the over 65s? IT may just be the best solution to keeping a life.

References

Australian Bureau of Statistics (1993) Australian Social Trends, Canberra: AGPS.

Australian Bureau of Statistics (1999) Special article: The information society and the information economy, <http://www.abs.gov.au/>

Bowling, A. (1994) Social networks and social support among older people and implications for emotional well-being and psychiatric morbidity, International Review of Psychiatry, 6, pp. 41-58.

Glatt, S., Hubble, J., Lyons, K., Paolo A., Troster A., Hassanein, R. & Koller, W. (1996) Risk factors for dementia in Parkinson's Disease: effect of education, Neuroepidemiology 15, pp. 20-25.

House, J. S., Landis. K. R. & Umberson, D. (1989) Social relationships and health, Science, 241, pp. 540-544.

Ito, M., Adler, A., Linde, C., Mynatt, E. & O'Day, V. (1999) Broadening access: Seniornet and the case for diverse network communities, http://www.seniornet.org/research/snaccess_980303.html

Komito, K. (1998) The Net as a foraging society: Flexible communities. The Information Society 14(2), pp. 97-106.

Kraut, R., Patterson, M., Lundmark, V., Kiesler, V., Mukopadhyay, T. & Scherlis, W. (1998) Internet Paradox: A social technology that reduces social involvement and psychological well-being? American Psychologist, 53, pp. 1017-1031.

Schaie, K. (1993) The optimization of cognitive functioning in old age: predictions based on cohort-sequential and longitudinal data, in P. B. Baltes and M. M. Baltes (eds.), Successful Aging: Perspectives from the Behavioural Sciences. Cambridge: Cambridge University Press.

Swindell, R. & Mayhew, C. (1996) Educating the isolated ageing: improving the quality of life of the housebound frail elderly through educational teleconferencing, International Journal of Lifelong Education, 15(2), pp. 85-93.

Young, D., Lawlor, P., Leone, P., Dragunow, M. & During, M. (1999) Environmental enrichment inhibits spontaneous apoptosis, prevents seizures and is neuroprotective, Nature Medicine, 5, pp. 448-453.