A U3A without walls: Using the Internet to reach out to isolated older persons

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Abstract

A range of health-related and situational factors prevents many older people from enjoying and benefiting from adult education activities. Isolated Bytes (IB) is an experimental "U3A without walls" that uses the Internet to provide cognitively challenging adult education programs to isolated older people. The characteristics and aspirations of 29 participants, and also their perceptions of two eight-week long pilot courses, are described. Nearly three-quarters of the participants were women and most of these were aged 65 and older. Few were experienced Internet users. More than half lived in large cities but considered themselves isolated by circumstances such as poor health or caring for an ageing spouse or friend. All rated the Internet courses very highly. This pilot study suggests that adult education courses provided over the Internet may be able to enrich the lives of isolated older people.

Introduction

During the last three decades many adult education programs have been devised specifically for the burgeoning Third Age population (Knox, 1993; Moskow-McKenzie & Manheimer, 1994; Swindell & Thompson, 1995). This growth reflects an increased interest by retired people in taking control of their own lives while engaging in leisure pursuits that are both personally rewarding and intellectually challenging.

In most cases older people either run the programs in their entirety, or else they maintain control of the programs but utilise the resources of professional educators to help achieve their educational objectives. The British or self-help U3A model is perhaps the best-known example of the first approach. Well-known examples of the second approach are the French University of the Third Age (UTA), the North American Institutes for Learning in Retirement (ILR) and the Elderhostel models. Variations of one or other of these approaches can be found in most parts of the world (Swindell & Thompson, 1995). Regardless of the approach adopted, the programs appear to have minimised or entirely removed many of the barriers which had proved in earlier years to be strong deterrents to later life educational participation (Courtenay, 1989).

Health and well-being implications of cognitively challenging activity in later life

A number of adult educators, sociologists and gerontologists have argued that later life adult education should become a societal imperative (see, for example, Havighurst, 1976; Groombridge, 1982; Nusberg, 1991). Recently, these arguments have been further bolstered by scientific findings that suggest possible health-related benefits associated with 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 Alzheimer (Snowdon et al., 1996) and Parkinson-related 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 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. The most obvious of these constraints are broadly related to health. For example, the Australian Bureau of Statistics (1995) reported that disability increases rapidly with age beyond the age of 65. By age 65, approximately 56% of the population reports some form of disability, chiefly arthritis, circulatory disease and hearing loss.

Despite a rapid increase in health-related problems with age, the majority of older Australians report their health as good, very good or excellent (Australian Bureau of Statistics, 1995). This seemingly anomalous finding is because older people rate functional independence and quality of life as the main criteria 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.

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 factors that jeopardise social networks. For example, 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.

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; Porter, 1997; Smith & Kollack, 1998). Recently, 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, many older people do not have a wide range of options to choose from when it comes to reestablishing or maintaining their social networks. A recent report from the Australian Bureau of Statistics (1999) revealed that the average adult spends about three hours alone each day. However, a man aged over 65, living by himself, is likely to spend 12 hours a day on his own, which represents 83% of his waking life. A woman of similar age will spend about 78% of her waking life alone. These statistics suggest that 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.

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 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 by the Australian government as part of its celebrations for the International Year of Older Persons.

Would-be members of IB join by logging on to the U3AOnline homepage at http://u3aonline.edna.edu.au/ At the time of writing there was no charge for membership but, by the beginning of 2000, it is anticipated that members will pay an annual fee of about $30, which is approximately the average membership fee for Australian U3A groups. This annual membership fee will be the only charge for course participation.

Isolated older people from any country may join IB. They are asked to conform to the following self-selection criteria:

- they are, or would be, eligible to join a "conventional" U3A if this were available nearby;
- they consider themselves to be isolated in some way (e.g., by distance, illness, acting as a care-giver etc.); and,
- they have ready access to a computer with Internet connection.

Within four months of the program's origin, and with very little advertising,

membership had passed 150. Most members are from Australia but some have registered from NZ, the USA, the UK, South America and Canada.

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, 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 them. This style of course required participants to be active 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.

Major findings from the study are summarised in the following section. The full 100 page report, which contains details of IB, methodology of the study, findings, comments from all main players including participants, tutors, administrators, technical personnel, and the survey instruments can be found at http://u3aonline.edna.edu.au/ This level of detail may be of value to adult educators and practitioners who wish to develop other Internet programs for older adults.

Findings from the IB study

Age and gender

Seventy-two per cent of the participants were women and about two-thirds of these were aged over 65. This finding could be of interest to organisations wanting to develop strategies for encouraging women to better access new technologies. For example, in Australia, the National Office for Information Economy has recently set up a Women and IT Advisory Group. The Advisory Group reported that older Australian females are particularly at risk, with only 5% of those aged 55 and over using the Internet compared with 12% of Australian males in the same age range.

Isolation

Australia is a very large continent, approximately the area of the USA, but with a population of only 19 million people. 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.

Participants were asked to describe the ways in which they felt isolated. Four main categories emerged from these descriptions. Distance or distance-related problems, such as poor public transport and no longer driving (40%) ranked equally with disability and health-related problems (40%) as the main causes of isolation. Care giving roles such as caring for sick or disabled partners or friends or caring for grandchildren was the third most frequently cited isolating factor (13%). The smallest grouping (7%) felt that there were no people with like interests in their area.

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 is often 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.

Formal education backgrounds

Formal education level is a predictor of whether a person is likely to take part in adult education activities. Generally, the higher the level of formal education the higher the likelihood of participation (Peterson, 1983). Participants were asked to nominate their highest level of formal education completed. As anticipated, the majority or participants (80%) had completed high school or better and are 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.

Former occupations

About three-quarters of the participants formerly held professional, business or managerial occupations. The remainder came from backgrounds that are not normally well represented in voluntary adult education programs, like homemaking, the trades and farming. In future studies it will be interesting to see whether Internet programs attract appreciable numbers of older people whose working lives did little to encourage participation in adult education programs.

Distance education backgrounds

Nearly two-thirds of the participants had no prior experience of learning at a distance and would have had to adapt to working to a self-imposed schedule without the kinds of tutor and peer support systems that are characteristic of most conventional face-to-face courses. The low drop out rate and the positive feedback on the courses suggests that most participants had little difficulty in adjusting to the discipline of Internet learning.

Preferred method of course delivery

Before and after the pilot program participants were asked to nominate from four given options their preferred method for course delivery. The options were: all face to face with tutor and colleagues; some face to face with some distance education methods; all by distance education but using a mixture e.g., print, video, phone and computer; and, all by computer. None of the participants had prior experience of studying via the Internet.

Following their Internet course about two-thirds stated a preference for learning entirely by computer. Nearly a half of these had switched from their initial pre-course preferences of all face-to-face learning, and mixed distance methods.

Participants' technology skills

Participants were not initially screened to determine their ability to manage routine computer-related skills. Instead, because IB members are required to register and provide some background detail by e-mail, it was assumed by so doing that they would have the necessary computer skills to carry out the mechanical aspects of the course. This assumption was incorrect for about half of the registrants. For the first few weeks of the course the tutors and IB coordinator spent many hours providing telephone and e-mail advice to individuals about matters like saving stories as text files and attaching files to e-mails. Even when electronic instructions were provided, which described how to carry out required procedures, some confusion remained.

During the fourth and fifth weeks of the course a telephone survey of all participants found that many were still frustrated about their inability to handle computer-related tasks. Once they had been "talked through" the task their sense of frustration usually disappeared. For future trials it might be valuable to have a pool of "computer tutors" who could be contacted for assistance by e-mail, as the need arises. The computer tutors could be U3A volunteers from anywhere in the world.

Course duration

The pilot course duration was somewhat arbitrarily chosen in the belief that eight weeks would not be too daunting a block of time for a volunteer course writer/leader to commit to. Participants were asked whether eight weeks was suitable for them. No one felt that eight weeks were too long. About two thirds considered the duration to be 'about right', while the rest considered it to be 'too short' or 'far too short'. This suggests that it may be acceptable to run some slightly longer courses in the future if writers would like to do so.

Weekly time demands

In both the pre- and post-course questionnaires participants were asked to indicate the number of hours per week that they were prepared to devote to a course. Initially, many participants over estimated the amount of time that they were prepared to spend on their course. After the course about a third downgraded their estimates with the majority (60%) settling on 5-10 hours as the ideal amount of time per week. Only one person upgraded his/her estimate. Responses were similar for both course groups.

Participants were asked to rate the actual time demands of their course on a 5-point scale ranging from very heavy to very light. About three-quarters of the participants thought the time demands placed on them by the course were about right. The remainder found the course demands to be light or very light. These responses suggest that, where possible, writers should provide optional enrichment activities that complement the lesson theme.

Course format

The two course formats were markedly different. The botany course had a heavy emphasis on diagrams and teacher-centred discussion of concepts. By contrast, the writing course was much more student-centred and required participants to write their own stories and post these to the "Writers Corner" for subsequent discussion by the tutor and other course members.

No one from either course was dissatisfied with the format. However, in general, participants in the botany course were happier with the course format (i.e., the way the course was structured) than were their writing counterparts. There are two possible explanations for this. The first centres on what participants might have imagined their Internet course would look like before the course began. Learning via the Internet is a new experience so it is likely that most participants would have had a mental image of an Internet course being something like a "text book on screen". Of the two courses, the botany course would have more closely approximated this image, (even though it was much more than an electronic text book.) Therefore, participants in the botany course may not have had to make substantial conceptual changes in order to accommodate the format of the course.

The second possibility relates to the mechanical demands on course participants. The biology course encouraged participation and interaction but made few demands on participants to do so. By contrast, participation and interaction was the principal focus of the writing course - there was no point in joining the course unless participants were prepared to write and submit stories and comment on the work of

others. The main computing-related difficulties encountered by participants, such as converting information to text files and sending participant-generated material to interactive sites, were associated mainly with the writing course. In addition, there were four interactive "Writers' Corner" sites introduced during different stages of the writing course, and locating and moving between these created some confusion. When the courses are next offered, and the specific computer-related difficulties have been rectified it should be possible to determine which, if either, of the above possibilities is more likely.

Participant satisfaction

Despite initial frustrations with what appeared to be basic technology-related skills, levels of participant satisfaction were very high. Nearly 90% were completely satisfied. The three members who were not completely satisfied still rated the course as valuable. No one was dissatisfied with the course. All expressed a keen interest in continuing to take courses via the Internet with half wanting to continue immediately and the other half wanting a break first. None selected the 'not interested category'.

Communications between course members

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, did not communicate with either tutor or other course members, yet they rated their learning experience highly.

In order to help develop an electronic learning environment, as opposed merely to transmitting information across the Internet, it would seem desirable to allocate the limited number of course places to those who are interested in interacting with others in their course. However, the passive learners also enjoyed the learning experience - they should not be excluded from a course merely because they do not interact with others. A way of resolving this dilemma would be to develop two categories of course membership, namely full membership and course observer membership. Full membership would be reserved for those who are interested in communicating with each other and their tutor. Observer membership would be offered to those who require the cognitive stimulation or factual information provided by the course, but who are not really interested in communicating with others. An additional advantage of creating an observer category would be that those who miss out on the limited number of full membership places could still have access to the course material, even though they would be unable to contact the tutor. To cater for observers who would like to communicate with each other it would be technically simple, as well as inexpensive, to set up an Observers Forum.

Conclusion

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 and some of the questions raised from this pilot study are applicable to a wider ageing population. For example, a large majority of participants in conventional Australian U3A groups are women. Similarly, the majority of participants in the IB pilot study were women, mostly in the older age range. Might the self-paced, private setting in which IB courses are run, 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? And what of the finding that one-fifth of the sample had minimal formal education levels, and nearly one-fifth comprised participants from working class or homemaker backgrounds? Could the Internet be developed as a vehicle to empower the vast numbers of older people, who had little or no opportunity or encouragement in earlier years to engage in the personally uplifting educational programs that are routinely available to later cohorts? The flexibility of the medium allows participants to retain whatever level of privacy they need yet also permits very considerable inter-personal 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.

Of necessity, the IB pilot study was limited. Nevertheless, the initial findings whet the appetite for further work. Since the study was completed U3A volunteers have developed several other courses for IB members. At the time of writing this paper a new course, entitled Design for Living, had been written and was being delivered to IB members. The novel feature of this course is that the writer/tutor is a U3A member living in the UK. She will run the course from the UK, illustrating the potential of a U3A without walls to provide expertise from anywhere in the world, to isolated older people anywhere in the world.

Seniors in the USA are reported to be the fastest growing group on the Internet (Charles Schwab and Co, 1998). It is likely that the growing popularity of the Internet with older people in the USA will be replicated in other countries. If that is the case, programs like IB, and similar programs that are currently under development in Europe, Canada and elsewhere, appear set to enrich the lives of many older adults.

References

Australian Bureau of Statistics (1995) 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.

Charles Schwab and Co. (1998) Report on Senior's computer and Internet usage: Report of a national survey. http://www.seniornet.org/research/rsch_0998.html

Courtenay, B. (1989) Education for older adults, in S. B. Merriam & P. M. Cunningham (Eds) Handbook of Adult and Continuing Education, San Francisco: Jossey-Bass.

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.

Groombridge, B. (1982) Learning, education and later life, Adult Education 54, pp. 314-325.

Havighurst, R. (1976) Education through the adult life span, Educational Gerontology 1, pp. 41-51.

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

Knox, A. (1993) Strengthening adult and continuing education. San Francisco: Jossey-Bass.

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.

Moskow-McKenzie, D. & Manheimer, R. (1994) A planning guide to organising educational programs for older adults. Asheville, NC: University Publications UNCA.

Nusberg, C. (1991) UN takes action on Principles for Older Persons, Ageing International XVIII, 3-7.

Peterson, D. (1983) Facilitating education for older learners. London: Jossey-Bass.

Porter, D. (Ed) (1997) Internet Culture. NewYork: Routlidge.

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.

Smith, M. & Kollack P. (Eds) (1998) Communities in Cyberspace. New York: Routlidge.

Snowdon, D., Kemper, S., Mortimer, J., Greiner, L., Wekstein, D. & Markesbery, W. (1996) Linguistic ability in early life and cognitive function and Alzheimer's disease in later life. Findings from the Nun study. Journal of the American Medical Association 275, pp. 528-532.

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.

Swindell, R. & Thompson, J. (1995) An international perspective on the University of the Third Age. Educational Gerontology, 21, pp. 429-447.

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.