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Creating Older Adults Technology Training Policies: Lessons from Community Practices

Introduction

Life-long learning for adults over 55 years of age is increasingly continuing beyond ceasing paid work. Yet it is argued that, overall, government educational policy makers are not keeping pace with forming supportive training polices to manage growing demands for older adult learning (McIntyre 2005, Anderson 2004). Much attention is being focused on the need to form national educational policies to guide how older adults are taught and how community learning programs are administered. Creating life-long learning policies for re-training and skilling older adults has individual and community benefits. These include the prevention of individual isolation from the community, access to social networks and the ability to use complex new technologies. Community and non-profit organisations are now major providers of older adult training which provide opportunities for such benefits.

Governments attempt to create uniform national training polices that advise community training centres on effective ways of teaching adults. Yet it is believed that this process of forming uniform polices is inconsistent (Bardon, 2007). Kearns (2005:373) has commented that Australia community learning is little acknowledged as a key contributor to rapid and consistent social change. The assumption from these comments is that adult training, particularly for purely vocational purposes, is not a priority government in policy formation.

Increasing attention is being paid to Information and Communication Technology (ICT) training for older adults. Despite growing demand from retired and working older adults to learn such skills, governments take little interest in forming policies in this area. There have been attempts from government departments to advise on adult learning policy and desirable teaching of older adults. The Federal Department of Communications, Information Technology and the Arts (2005), for example, has published case studies on the policy and teaching practice successes of various non-profit organisations. A common theme in these studies has been how community organisations form and administer their own ICT training and skills policies and

teaching practices to meet student needs. Creating effective policies and practices to administer and teach ICT skills for a growing older population, without government policy guiding frameworks, becomes the functions of community organisations.

However, older adult ICT training policies have been successfully created, particularly in disadvantaged communities, though locally formed policies and specific teaching practices. These communities can be rural or urban areas with ageing populations and low income levels. Often the policies have been successful in attracting students despite considerable obstacles such as a lack of government funding. Though these have impacted on organisations' abilities to teach older adults ICT skills, longevity of programs and increased student retention rates have been achieved. Two questions for examination arise. If the demand for ICT training is increasing, why do some community organisations' training policies and practices encourage community interest and grow their student base without government policy support to guide its programs? Second, what are organisations doing daily that may give insights into how they are successful in teaching older adults when faced with labour and financial shortages?

To examine these questions, an illustrative longitudinal example study in one community centre will be discussed. The aim of this paper is to contribute to an understanding of how locally formed policies, and specific teaching practices, can maximise the older adult retention rate. Such knowledge and research can be given to educational policy makers to show the types of policies and practices that are viewed as successful in ICT training. This paper will suggest that examining student experiences gives educational policy makers knowledge of what factors can be incorporated into forming policies that benefit working or retired older adults, and the community training organisations that provide such training.

Research in policies and practices in Australian ICT training programs

A policy is often a general course of action in written form that suggests desirable practices that maximise successful outcomes. Creating local informal ICT training policies has personal and community benefits and outcomes. Reported benefits to older adults in undertaking ICT training include a sense of belonging to a group, encouraging self-sufficiency by accessing internet information and maintaining social and family connections lost after ceasing work (Townsend, 2006). Research on effective older adults training needs suggests that ICT training practices and policies should primarily be self-directed and goal specific instead of teaching a fixed curriculum of skills (Poynton 2005, Farrow, Hayward & Huta, 2005). Having an absence of such guiding policies and effective teaching practices affects the outcome and uptake of ICT training. For example, a barrier to longevity of ICT training programs has been the management of working relationships of people involved in ICT training projects. The failure of ICT training in some organisations can occur from the lack of policies in managing available voluntary workforces.

Case study research of inadequate workforce management policies, and their negative effects on ICT training programs, was illustrated in studies by Coco and Jolly (2003) and Coco and Short (2004). A problem they observed was the volunteers' desire to keep the centre inward focused and not publicise its training programs to geographic areas beyond their local surrounds (Coco & Jolly, 2003). Disagreements on what topics to teach and how to teach them occurred, hence self- interest and group conflict indirectly caused students not to come to the centre because offered ICT topics did not suit their needs (Coco & Short, 2004). Some workers also did not see any use for ICT training in their own lives despite being shown evidence of its usefulness in the lives of older adults. This negative view was observed by students at the centre resulting in the program's failure to attract and retrain students (Coco & Short, 2004).

Community ICT policies and practices are successful when the policy takes a student centred approach and concentrates on solving students technology training needs. When students are not at the centre of teaching policy it is difficult to attract and retain them. Curricula need flexibility in the types and breadth of topics taught. This extract from The Smith Family (2005) report on community education illustrates the focus behind the policy of the student being at the centre of a learning program:

That lifelong learning initiatives adopt a learner-centred approach to facilitate self-paced, personalised learning trajectories within a 'whole-of-community' perspective that makes this learning attractive and applicable to people of all ages, genders and socioeconomic backgrounds.

In the context of teaching older adults ICT skills, making learning applicable to people of all ages means knowing older adults have different learning needs and motivations for learning. Making learning desirable to this group means structuring ICT training policies in ways that find out what is important and relevant to the older adult.

Studies in older adult ICT training practices can be useful to alert educational policy makers to what might constitute success in retention rates of ICT training. This includes knowledge on the workforces that teach and administer ICT programs. Coco and Jolly (2003) and Coco and Short (2004) suggested that labour and financial shortages were not always the cause of the cessation of ICT training programs. Some programs have managed labour issues through much the same way commercial enterprises manage workforce work and relationship issues. The daily level co-operation and working together of volunteers and administrators of ICT programs might be strong enough to overcome the barriers faced by the centre. The ways community organisations managing ICT teaching teams, resources and student relationships can give governments information on informal practices that support older adults in ICT skill acquisition. Therefore, these practices, when communicated to government bodies, can be incorporated into the formation of policy by showing how good labour management impacts on positive outcomes of older adults training.

The centre and the study

The research site and research methodology is presented here as an example of ICT training taking place in a local community. What has been observed is that this centre's ICT training program has continued through the forming of its own training and workforce management policies. The centre in this study has been offering ICT training since 1996. Similar to Coco and Jolly's (2003) research site, the centre is in a perceived economically disadvantaged community with an ageing population and a lack of employment opportunities. The centre designs its activities based on the World Health Organisation's (1946) definition of health; it being a state of complete physical, mental and social well being, not just the absence of disease. Although many physical, social and intellectual activities are offered, it has been the computer

program that has achieved longevity other disadvantaged communities have been unable to sustain.

The centre's voluntary tutors range in age and are retired or sourced from Federal Government employment mutual obligation programs. Some tutors have extensive backgrounds in information technology disciplines. Three computers, two with broadband internet access donated by a local council, have a variety of software programs available to be taught. While some formal computer awareness classes are held, the tutors have adapted their lessons to the needs of the student. Two crucial factors in older adult learning, identified by Knowles (1990:229), are adopted as policy in the centre's program: the students want to learn ICT topics according to their past experiences and they want a tutor interested in their skill and personal development. The ages of the students range from 55 to 80. Some students are from ethnic backgrounds and are catered for when tutors have second language skills. The tutors also update the centre's website and provide technical support such as installing software and fixing hardware issues.

This paper's discussion and insights were formed from data collected since 2002. Interviewing older adults and observations of lessons were the data collection methods. The analysis of the data was done using Strauss and Corbin's (1998) Grounded Theory Method. Explanations accounting for the observed phenomena that students kept returning to lessons emerged from constant data analysis and comparison, with a set of categories being formed which explained the perceived view of centre success in consistently high student retention rates. Grounded Theory was useful in its ability to provide a framework of discovering reasons for older adults' decisions to undertaken and regularly attend training rather than proving or disproving theoretical explanations.

Experiences of one community centre's ICT policies and practices

The key finding was that the centre's success in retaining students was primarily attributed to the tutors, centre management and student working relationships. A problem-solving approach to ICT training practices was an effective teaching practice and policy in retaining and attracting older adult learners. Although set ICT topics were taught, the tutors concentrated on solving student specific individual information technology problems. The teaching policy centre management formed as the basis of their ICT training was to ask older adults the type of technology issues they struggled with in everyday life. In doing this, they were able to problem solve computer issues by showing the exact procedure to perform the action correctly. However, this was done without assuming the student knew what other users might take for granted. This example of teaching website navigation, a requested skill in older adult ICT training, is an illustrative comment of this practice from the student's view:

...because he always asks me what I'm interested in. And I've already a couple of things on the website so we did that today. I sent one, got one thing up on the website, it obviously worked because I asked for a catalogue and I received that yesterday.

The tutor specifically asked what the student's problem was with obtaining the internet information. When shown sequentially how to navigate a website to find the catalogue it solved the student's problem of finding information on a difficult to navigate web page. This practice became adopted common policy amongst the tutors despite it not being incorporated into any written requirement of tutor's duties.

The centre's tutors and management were also aware of the demand to learn skills to communicate electronically with family, friends and others. An effective teaching practice was to teach older adults electronic communication skills, such as email and chat room use. A common finding was, although the teaching practice of providing technical explanations was important, the students were encouraged to use this medium to communicate with distant family and friends. One student found handwriting difficult; a tutor taught her how to use email to overcome the lessening written contact she had with family and friends:

I'm really interested in using the Internet and sending e-mails, mostly sending emails (pause) which my family, I'm not very good at letter writing and I find it so easy, and I keep in touch with my daughter in the UK and I used to live in Kenya and keep in touch with friends there. So it's very, very good.

As this example suggest, the tutors encouraged such attitudes by bringing the student to this level of confidence through showing how to gain control over the medium. This was based on tutors informally assessing that the student was absorbed in the experience and gaining control over a challenging experience, as Cody et al (1999) suggest as optimal teaching practice.

The centre conducted most lessons between a tutor and one student rather than group training. A strong argument for this policy was that many older adults attending the centre's lessons preferred greater control over the pace of learning material. That did not mean every student was physically or emotional challenged in some way. Rather, it was formal training environments, such as TAFE and online learning, did not offer an important skill overlooked – for tutors to repeat instructions constantly. This was a significant issue that older adults reported in seeking out ICT training; feeling inadequate at not keeping pace with others, particularly younger people, in classroom situations. The practice of repetition and individual attention is illustrated in these two quotes.

Because of the one on one. And as I mentioned, anything I don't understand or, you know, he will show me again and I find that most helpful.

Probably the fact that it was a one-on-one basis rather than group lessons. I find group lessons and the fact that I can choose what I want to learn here, where I can quote if I go to a group you have to follow what they want to tell you and I not interested in

Tutors followed the policy, suggested in studies such as Mellor, Firth and Moore's (2004) internet adoption study, that there should be willingness by tutors to conduct lessons at a slow pace, repeat material and reassure the older adult that failing procedures were a learning experience, not a fault of the learner.

Another policy centre management created was to encourage co-operative working relationships between tutors and administrative staff. Whilst Coco and Jolly (2003) and Coco and Short (2004) consistently found team members were unco-operative toward each other on training issues, the centre avoided this. Regular meetings addressing worker issues and relationships were held. Although set policies existed on how tutor should behave toward older adult learners the informal understandings of conduct were learnt and passed on to new tutors by previous tutors. This behaviour

was, in turn, observed by the students, who repeatedly reported that a new tutor was not a reason to cease having lessons as this example suggests:

No a combination of who ever is available, there is no preference. One is as good as the other I find. Age certainly has nothing to do with it. Some I have been sorry to see go for better things, but for their own sake I am happy for them.

This view was encouraged by the policy that tutors were aware of their colleagues' students' study needs should that tutor leave. The tutors also sought information from the internet, each other and their informal professional networks to solve problems when they encountered material they could not teach. One tutor had a greater knowledge of Microsoft Excel procedures, while another was proficient in fixing hardware problems. Both worked with, and learnt skills from, each other while solving the students' areas of concern. The centre ensured, as a policy, that the tutors could interact with and teach the students the same material if the student's main tutor was not available.

Getting older adults interested in ICT training involves persuading them how training can improve their lives. Cost of lessons, identified as a major barrier for older adult participation in ICT training (DCITA, 2005), was not an issue at the centre. Lessons were kept at a minimum price with only one increase since this study was undertaken. There were two policies issues that hindered the program's progress in terms of attracting more students. The first was promoting the computer lessons to a wider community geographic area. While the centre had some advantage in being able to tailor student training, there was reluctance to compete actively for student attendance. Word of mouth advertising was preferred over large-scale media and poster campaigns. A second issue was opposition from other groups using the centre that ran craft and game activities in the same open room as the computer lessons. Whilst some students from these became curious of the computers and attended lessons, some centre participants were hostile in their comments of the invasion of their space. This did not stop the lessons from proceeding. Rather, it meant centre management and tutors needed constantly to convince the groups the computer lessons would not interfere with other established activities.

Having the computers in the same room as other activities affected participant relationships between the computer tutors, students and other group members. For example, one leader of another group made persistent negative comments directly to the tutors and some other students. As Coco and Short (2004) found in their study, this can influence others decisions to attend lessons because of the perceived credibility the other activities leaders have in negative and positive views of the computer lessons. To address this, the centre's management adopted a continuous but subtle strategy of compromise where lessons could be postponed if the other group had an activity on. This suggested the need to be aware of undertaking ICT training in mixed use community centres. Although there was still hostility from members of other groups, the computer lessons continued. However, this situation suggests a policy that space devoted to ICT training should be separate from other activities to reduce potential conflicts over ownership of physical space.

Can community ICT research experiences influence adult learning policy?

This study demonstrated that the centre's ICT policies and teaching practices contributed to its longevity and retention. It did so by concentrating on the ICT needs of the students. But it did so with, initially, no guiding frameworks from government on what policies and practices successfully teach older adults. It was the willingness of the centre's management to continually experiment with teaching styles and ways of administering the program which saw it continue. Those daily activities were observed over time and by describing them in the study, a conclusion reached is that certain practices of teaching and running ICT programs do retain students.

Authors, such as Bardon (2007), Anderson (2004), The Smith Family (2005) and the DCITA (2005), address macro community issues affecting educational policy. They all argue for unity and national standards of adult educational practice, whether for retraining adults or training those no longer working. But the belief here is that without paying attention to what works in terms of micro-teaching practices and policies developed, often without guidelines, policies can be developed which advise optimal and desirable ways of managing ICT training. Though not every practice would work in every centre, the study still showed those practices and policies that maximised the longevity and retention rates of students. They can contribute to an

understanding of what can work in older adult ICT training and be reported to the community training providers.

To illustrate these claims, the value of such research to policy makers is demonstrated in answering this study's research questions. The first question was why community interest and student retention rates can be successful without guiding teaching and policy frameworks from government, is answered by the study's observations. The centre maintained interest in the ICT training because the tutors practised solving individual student's information technology problems. There is little to no government funds for specifically training teachers and tutors in older adult learning. But through trial and error, the centre's management observed and incorporated into policy those teaching practices that students positively responded to.

A key teaching practice example is reassuring the older adult when an action on the computer goes wrong. This suggests a different framework of teaching from adolescents or primary school students. Educational institutions have specific teaching programs for middle-age school students where teachers are taught ideal techniques for teaching this age group. This gives a framework for teachers to present material in a way that suggests teaching this group will result in the retention of knowledge. The same is not happening for older adults, though this centre has noted and applied in teaching policy specific ways of assisting older adults to retain and apply ICT skills to daily life.

The second question was, what are organisations doing daily that may give insights into how successful they are at teaching older adults when faced with labour and financial shortages? Like commercial enterprises, teamwork, volunteer people management and resource management are crucial to program continuity. This centre managed the tutor workforce by adopting important co-operative work policies. First, a formal induction meeting was held where centre management would explain the particular styles of teaching older adults necessary to be carried out. Second, provisions were made for other tutors to continue teaching existing students should a tutor leave. But as in paid workforces, drawing on the knowledge of tutors, however long they taught there was vital. With their vast knowledge of computer issues they were able to research and teach current and emerging information technology issues.

How documented research experiences may influence policy is by providing examples of successful learning polices and practices in one centre. Coco and Jolly (2003) and Coco and Short's (2004) material documented the type of problems an ICT training centre can have with relationship conflicts and a lack of reported guidelines about what constitutes good practice. In this sense such cases of positive and negative experiences alert policy makers to what is happening in the growing ICT training area. Bardon's (2007) agreement with a description of community centres as being learning providers can be achieved but not without awareness of what these centres actually do and how, they can continue ICT training programs.

The problem in presenting such material to policy makers is many, necessitating a commitment to persistently present research to government entities. Our experiences of contact with educational policy makers and government bodies were that government educational departments were interested in finding out about the program's success. However, the centre had to persistently stay in contact with them and consistently send reports which were, for the most part, ignored. It is difficult when policy makers have other educational imperatives and centres often have to wait for formal requests for material as the DCITA has sporadically done. This may lie with the fact that older adult learning is not tied to economic outcomes like primary, secondary and most tertiary education and training is.

Nevertheless, the argument here is that presenting research to policy makers that will assist in supportive policies for older adult ICT learning is a necessary imperative. Without more information on how older adults are learning, and staying with that learning, educational policy makers risk being isolated from forming policies to serve this group. What was useful about the reviewed studies and this study was to show in finer detail what worked and what did not work for ICT training centres. This is valuable as it provides the types of information, and valuable lessons that can form the basis of policies and practice for those venturing into teaching older adult learners. The challenge is to find those in educational policy making who can make this area an imperative and create policies to guide good ICT teaching practice.

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