Millar's story: The dynamic experience of an older adult computer learner

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The participation of older adults in computer learning environments is a recent phenomenon. Older adults of the twenty-first century have not grown up with information and communication technologies and are not likely to have used computers in their working lives. They may even feel alien in the world of technology. The purpose of this paper is to present a narrative description, and tentative analysis, of one person's learning journey in this world. The interpretative analysis is guided by the principles of qualitative research, using case studies, and focusing on the individual experience of the learner. This article represents current findings in the early stage of a PhD thesis.

Introduction

The world is in a constant state of rapid change. For older adults living in developed countries, the world of today is very different from the world into which they were born. Jarvis (1992) believes that, for some, it might even be very different from the world into which they retired. The sources of these changes are historical and cultural and affect the everyday lives of people and their interactions with other people. Advances in information and communication technologies have contributed greatly to this change. The widespread use of digital devices for communication, banking, shopping and domestic use necessitates a familiarity with such devices and disadvantages those unable to use them. Evidence suggests that older adults in Australia are increasingly using the Internet, engaging in computer lessons and purchasing computers. In 2000, 26% of all 55–64 year olds and 9% of all 65+ year olds were regular users of the Internet with a steady increase each year expected for some time to come (ABS 2003). Participation numbers for older adult computer lessons affiliated with the National Peak Body for Seniors and Technology have risen from a handful of people in 1998 to over 60 clubs with an estimated number of participants in a five-year period to be in excess of 50,000 (Bosler 2002). The strongest growth in computer ownership exists in the over-55 year age group (Bosler 2002). This growth applies to the purchase of new computers. It is unknown how many older adults obtain computers as "hand-me-ups" from relatives and friends. However, what is clear is that older adults are increasingly making computer-related decisions.

The willingness to use the Internet, attend lessons and obtain computers is only the beginning. Older adults may believe knowledge, skills and attitudes learnt in the past to be of less and less relevance in the world of today. This creates a dual challenge for them. They need to engage in learning in order to keep up-to-date and yet find their past learning and experiences of less and less value.

Jarvis (1992) suggests that older adults might find themselves in a constant state of disjuncture between their current world and their past life. The machinery of the computer may be unlike anything they have encountered. It has the potential to be seen as a powerful and mystical object and this mystique and awe can intimidate first time users (Granick 2002). Older adults are less likely than young people to have a sense of familiarity with computers. They have been introduced to computers at a later age and probably associate computers with the world of the young. They have been observers, not users, and watching younger people effortlessly manipulating the controls may give them a false sense of "this is going to be easy" (Granick 2002). She says they can lose any confidence they may have had very quickly when they discover they are unable to control the mouse. Unanticipated learning needs and loss of self-confidence may also prove disconcerting for older adult computer learners.

While specific technical skills and knowledge may initially be unknown to older adults, they may bring strengths to the learning. These strengths include maturity (Cloet 2000) and motivation (Perlmutter & Monty 1992). The learning strengths brought to the learning are as complex and idiosyncratic for older adults as they are for any age group.

I wish to highlight the dynamic experience of learners and to capture the meaning of this experience in their own words. Bruner (1986) suggests that a good story has the potential to convince readers by its lifelikeness (Willis 1999). I have chosen to include Millar's voice throughout the interpretation and discussion in the belief that this will provide resonance for readers.

Research questions

What is the nature of the learning experience for older adult computer learners?

What interpretations do older adult computer learners place on their experience?

What are the outcomes of the learning experience for older adult computer learners?

Methodology

Guided by the research questions, I investigated the experience of older adult computer learners by using a case study with a qualitative approach using a hermeneutic phenomenological inquiry method. This methodology was chosen because of its relevance in answering the questions. The complexity of the phenomenon with its many layers necessitates qualitative data that provide the opportunity for greater understanding. The learners and their experiences are the focus of the research and the qualitative approach is suitable for eliciting responses of an affective nature that will provide meaningful discussion. The learners may consider what they are doing as ordinary and an every-day occurrence but it is unique and out-of-the-ordinary. To bring this to light requires an interpretative approach. The fact that the phenomenon of older adults learning the computer is taken as self-evident in being beneficial and worthwhile, is proof that it needs to be explicitly revealed in its uniqueness. Hermeneutic phenomenological research has the potential to expose aspects of human life that are taken for granted in such a way that readers are more thoughtful and attentive to the phenomenon (van Manen 1997).

Method

I conducted 19 interviews in 2003 and 2004 in the Sydney metropolitan area. The questions were open-ended, providing for extended responses. Participants were over the age of 63 and learning in non-formal, voluntary, peer-tutor learning environments, specifically for seniors. They had not used a computer during their paid working life and they volunteered to participate in the research.

Data analysis

I applied thematic analysis to the interview transcripts, in a process of immersing myself in the data, and constantly referring to the question of the nature of the lived experience of the learners. I attempted to discover the pragmatic aspects of the phenomenon in the manner formulated by van Manen (1997) when he talked about the experiential structures that make up the experience. For this paper, I have consolidated some of my understandings of each of the case studies into a composite non-gender specific account, and have chosen what I believe to be the essential aspects of the learning experience. My perspective as a computer teacher has also informed my selection and interpretation. I hope that by using the voice of Millar, an amalgam of these case studies, the interpretation will resonate with other older adult computer learners. The chief role in the drama of learning is not played by external situations, but by the learner (Thorndike 1932, cited in Kidd 1973). This is my first published paper based on data analysis and I would like to use this opportunity to honour the participants in my study by telling their story. I am also hoping this may assist other learners in their journey and that they may recognise parts of the narrative in their own experience.

Interpretation and discussion

The learning experience for older adults is complex and dynamic. Millar's experience begins with what has been variously termed a trigger event, a disorienting dilemma or a disjuncture (Brookfield 2000). Millar describes the situation that leads to learning:

> I am a voluntary reading and writing tutor at my local primary school. My job is to listen to the young children read and to help them with their writing. About six months ago, I was helping a 3rd class child with her writing and she asked me how to underline on the computer. I had absolutely no idea. Another 3rd class child came along and helped her and I thought right

> then and there that I had to learn how to use the computer. I suppose it was my pride, because I couldn't help her but another child could. Also, I'm there to help them. That's my job.

Literature (Brookfield 2000, Jarvis 2001, Mezirow 2000) suggests there is a period of reflection after an unexpected event, in which an attempt is made to understand the dilemma, and seek to lessen the discomfort by "doing something about it". In Millar's case, the doing something about it could have meant no longer engaging in voluntary tutoring at the school or learning how to use the computer.

Millar's trigger event was sudden, explicit and easily traced, and identified. However, it may also be a series of events, which, in themselves, do not have the same effect on the individual that this one had on Millar. However, over a period of time and collectively, trigger events may accumulate from a series of integrating circumstances to provide just as powerful a sense of agency (Mezirow 2000).

Throughout the narrative, Millar recounts unexpected and potential learning events that lead to confusion, disquiet and dialectical thinking. This seems to involve a process of a negative construction as a computer user, deconstruction as a learner and the development of a re-defined computer learner. Millar begins the process of negative construction when faced with the inability to assist a young child with a computer problem. Seeing another young child assist supports this idea. Throughout the experience, Millar observes many situations in which people of all ages appear competent users, such as the grandchildren:

> My grandchildren came over to show me some of the things on the computer and they said, "Oh, it's easy. You just do this, and this, and this." I said, "But it's not that simple", and they said, "Yes it is, you just go click, click, click." But it doesn't work like that. To them it does.

and at the beginners' lessons:

> First up, I went to a beginners' course. When I got there all the computers were turned on and there were people using them. They all seemed to know what they were doing and I was the only one who had no idea. It was advertised as a beginners' course but they didn't seem like beginners to me.

Millar purchases a book in an attempt to better understand the computer learning environment. The choice of a text, *Computers for idiots*, suggests that Millar's self-concept is one of a computer idiot. Even this book didn't make sense so the conclusion Millar reaches is of being far behind the starting line.

> I bought myself a book, *Computers for idiots*, because I thought that would help. It didn't make any sense to me because it started off with a lot of the basic things that I didn't know about. So really, I knew I was a bit behind the eight-ball right from the start.

During the learning, Millar reinforces the negative construction by admitting the words are like a foreign language,

> The words they used were like a foreign language to me. Words like text, icons, desktop, default, hardware, software, scroll. I had no idea what they meant.

causing a program to crash, knowing this was not recommended,

> I had a problem with my email program. I got so frustrated with it when it wouldn't work, I pressed a whole lot of buttons, and the computer shut down. I'd read somewhere that if you don't do the right thing by turning it off properly, you could damage the computer. Serves me right, I shouldn't have pressed all the buttons.

and being unable to close a program without ringing the daughter,

> One day I was just clicking around on the computer, opening various programs and up came 'Links'. I clicked on it and it was

a golf game. I started to play it and after a while decided I'd had enough of that and wanted to get out of it. I couldn't see a way of getting out of it because it was all automatic and the girl kept hitting the golf balls. I thought I'd be there forever because there were nine holes to play. So I pressed a button and it kept saying, "Press Start and then end the game", but I couldn't see how I could because it was taking up the whole screen. So I fiddled and kept playing for a little bit and it wasn't getting anywhere, so I rang my daughter to ask her what to do. She told me to press Control, Alt and Delete, but that didn't work either, so she said, "Just turn the whole thing off". I thought, "Oh no, I don't think I'll go and have any more computer lessons. I think I'm really past it".

Millar takes a positive view on the ability to learn, based on past successful learning, particularly of machinery:

> I thought I'd be able to learn OK because all my working life I'd had to learn new things, especially machinery, and I'd never had any trouble. Anyway, I thought if young children can use computers, it can't be all that difficult. And I look around and see people who don't look overly clever to me and they can use computers. I don't consider I'm any bright spark or anything like that, but I still thought that I could get a hold of it.

There is an element of excitement about the prospect, and the challenge of learning, and openness in admitting ignorance.

> I wasn't nervous or embarrassed about going to computer lessons. I knew I didn't know and I found that exciting. It gave me a challenge and the prospect of learning something new. I was a little bit hesitant because you don't really know what you're in for, but I thought I'd go along and see and take it as it comes.

When the vastness of the computer reveals itself, it is a frightening and uncontrollable world. Millar has serious doubts about the ability to learn and reflects on the possibility of discontinuing lessons. The experience with the 'Links' program creates doubt about the ability to

learn and the worth of future computer lessons. To continue or not to continue?

The negative construction as a computer user and the deconstruction as a learner could have led to the withdrawal from learning. Millar seriously contemplates this. A period of critical reflection in which Millar questions the self-constructions of computer user and learner, results in an analysis of: "that's what learning's all about and it's not like anything you've ever learnt before". The previously constructed self as a capable learner and the recognition that the computer environment is unfamiliar provide a sound basis for Millar's positive self-efficacy and confidence, despite the early negative constructions.

> In the beginning you think you can do it, then when you realise just how much is involved, it turns out it's not as simple as you thought. There are so many things to learn on the computer. It's just so vast. I can never remember when to click once or twice or what to click first. It's a slow process and that's been a shock for me. It's slower than I anticipated. I expected to go in and after a few weeks think that I could do a whole lot which I can't. You have a one hour lesson and you don't think you've achieved much in that one hour, but you've gone through several different things and branched out into different things, but eventually it will all come together. It will take a bit of time; it's just a slow process, of learning. That's what learning's all about, I suppose. You really have to take a little at a time.

> This is a whole new experience and it's really daunting. It's not the learning so much as the techniques. They are strange. Something you wouldn't have even thought of 20 years ago. It's not like anything you've ever learnt before.

This leads Millar towards the process of constructing a positive self-image as a computer user and learner. Success provides grounding for this redefinition.

> I feel a great sense of satisfaction when I finally manage to do something after running into brick walls. A couple of weeks

ago, I made an order for an anti-virus program. A special deal that was offered to me because my old one had just expired and I ordered the new one over the net. I was lacking confidence in doing it myself, but I thought, "Well, I've got to do it", but I wasn't real sure how to do it. Anyway in the end, I went into it. Half way through it I got into a panic because it asked for my serial number and I couldn't find it. I didn't realise you could switch from one program back to another to find it. I had already given my name and address and bank card number. So as I said, I panicked and then I aborted the whole thing. I switched the computer off. I tried to make a phone call to the help line but they closed at 5pm and this was 8pm. Right, I decided, I have to go through with this, it's not going to get the better of me. So I turned the computer back on and had another go, starting from the beginning again. I entered in all the information for a second time and followed the cues and finally came to the end and saw the word "SUCCESS" flash up. I thought, "Right, well I can do something. Thank goodness, I've learnt something."

The narrative reveals the complex and dynamic nature of the learning experience. Millar repeatedly confronts the disjuncture of the past and present in the way that Jarvis (1992) suggests. The computer language and environment are strange and incomprehensible. Millar is unable to grasp the concepts and finds the learning is not proceeding as planned. Jarvis suggests the world of older adults may have changed significantly since retirement and the period of 20 years is mentioned by Millar in reference to the techniques being unthought of 20 years ago. This is the period since Millar retired from paid work. Confused by the seeming ease with which young children manipulate the computer, Millar considers withdrawing from lessons. The vast potential of the computer provides further cause for thoughts of the inability to learn. Granick (2002) refers to the effects on older adults of watching young people effortlessly manipulating the computer environment and the potential this has for loss of confidence. This is the case for Millar, who observes grandchildren

clicking with ease and confidence. Millar considers how simple it all looks when young people use the computer, but how different it is when older ones try. Strengths of motivation, maturity and critical reflection are continually being brought into play to counter the obstacles and difficulties encountered. Cloet (2000) believes maturity is a significant strength of older adult learners and Perlmutter and Monty (1992) state that motivation is another strength. Millar demonstrates these qualities in being able to reflect on the learning process generally and in overcoming difficulties in order to continue learning. The experience provides Millar with opportunities to face challenges and to experience significant developmental gains. There is recognition that learning at any age involves time and practice and is never straightforward. There are times of self-doubt and loss of self-confidence, but Millar is able to take great satisfaction in personal achievements, particularly "after running into brick walls".

Summary and conclusion

I have attempted to present Millar's story without undue interference and for it to be the focus of this article. Despite preparation and planning, Millar experiences repeated disharmony in dealing with the computer learning environment. The risk of placing the self in unknown territory pervades the whole experience. Each new learning effort provides another opportunity for pleasure or pain, at great affective risk. Millar's strengths appear to be in the ability to be critically reflective and self-directed and these attributes are combined with maturity and a tenacious resolve. I have taken a pragmatic perspective on Millar's experience and attempted to present the nuances of the experience. I hope that I have drawn attention to Millar's experience and not the actual events, in the way that Bruner (1986) and Thorndike (1932) suggest. Bruner (cited in Willis 1999) suggests that readers will relate to the story if it is told in a lifelike form. I have used Millar's voice in an attempt to present the story as being told by Millar. In a similar way, Thorndike (cited

in Kidd 1973) believes that learners play the chief role in the learning experience and this has been the focus of this paper.

The phenomenon of older adult participation in computer learning environments is well documented in quantitative terms. Millar's story provides an opportunity to view the experience from a qualitative perspective. I believe it enables a more human understanding of the complex and dynamic nature of older adults learning how to use a computer. This paper represents early data analysis. Further research may uncover evidence that will have implications for policy direction, and contribute to discussion on lifelong learning, most particularly about the place of older adult learning in the life course.

References

Australian Bureau of Statistics (ABS) (2003) 'Communications and information technology: Household use of information technology', http://www.abs.gov.au [accessed 24 April, 2003].

Bosler, N. (2002) 'I'm a senior: Why should I learn to use a computer?', International Federation on Ageing, Perth.

Brookfield, S. (2000) 'Adult cognition as a dimension of lifelong learning', in J. Field & M. Leicester (eds.), *Lifelong learning: Education across the lifespan*, London: RoutledgeFarmer.

Cloet, R. (2000) 'IT learning in peer groups', http://www.niace.org.uk [accessed 12 June, 2000].

Granick, L. (2002) 'Teaching computers to older adults', http://www.seniornet.org/edu/art/granick.shtml [accessed 30 May, 2002].

Jarvis, P. (1991) *Learning in later life: An introduction for educators and carers*, London: Kogan Page.

Jarvis, P. (1992) *Paradoxes of learning: On becoming an individual in society,* San Francisco: Jossey-Bass Publications.

Kidd, J.R. (1973) *How adults learn,* New York: Cambridge.

Mezirow, J. (2000) 'Learning to think like an adult: Core concepts of transformation theory', in J. Mezirow (ed.), *Learning as transformation: Critical perspectives on a theory in progress,* San Francisco: Jossey-Bass.

Perlmutter, L.C. & Monty, R.A. (1992) 'Motivation and aging', in L.W. Poon, D.C. Rubin & B.A. Wilson (eds.), *Everyday cognition in adulthood and late life,* Cambridge: Cambridge University Press.

van Manen, M. (1997) *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.), London, Ontario: Althouse Press.

Willis, P. (1999) 'Looking for what it's really like: phenomenology in reflective practice', *Studies in Continuing Education*, 21(1): 91–112.

About the author

Helen Russell *is a full-time PhD student currently undertaking qualitative research of older adult computer learners. The focus of the research is on the beginning stages of learning in non formal community-based learning environments. Teaching is provided by voluntary peer tutors, and learners are aged over 63 years, with no prior experience of using computers in their work life. Helen has considerable computer teaching experience with students whose ages range from 5 years to 90 years.*

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~~Identifying and Addressing the Needs of Adult Students in Higher Education~~

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~~As the number of adult students enrolled within higher education programs increases, educational institutions must respond by addressing their needs on a continual basis. Adult learners possess a wide variety of characteristics which are not common to a traditional student, including personal life barriers, financial responsibilities and different learning styles. This article identifies some of these characteristics, and discusses ways for administrators and educators within higher education to address them in order to cultivate a positive learning experience for the adult student.~~

~~Adults have become an integral part of the total enrolment composition within higher education institutions (US Department of Education 2003) for a multitude of reasons. In the past, many chose~~