



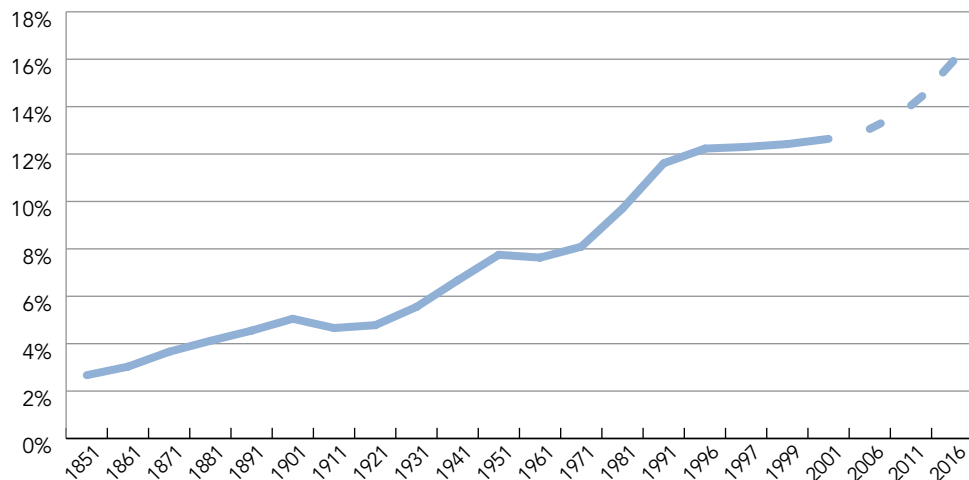
# LESSONS IN LEARNING

**Never too old to learn:**  
Seniors and learning in Canada

August 22, 2006

You don't stop learning when you grow old; you grow old when you stop learning. This has been the motto for the Seniors Program at Simon Fraser University (SFU) for decades. Learning is widely recognized as an important factor in keeping a person's mind active and agile. Brain experts believe that active learning helps maintain brain health by preventing loss of brain function and cognitive skills such as memory, reasoning, and judgment.<sup>1</sup> Increasing numbers of older adults are enrolling in various forms of continuing education in Canada. At SFU alone, enrolment among mature students (age 55+) increased dramatically from 297 in 2000 to over 1,100 in 2005. Many seniors across Canada are also engaged in active informal learning.<sup>2</sup>

**Figure 1:**  
Canada's aging population – percentage of the population over age 65



Source: Statistics Canada, CANSIM

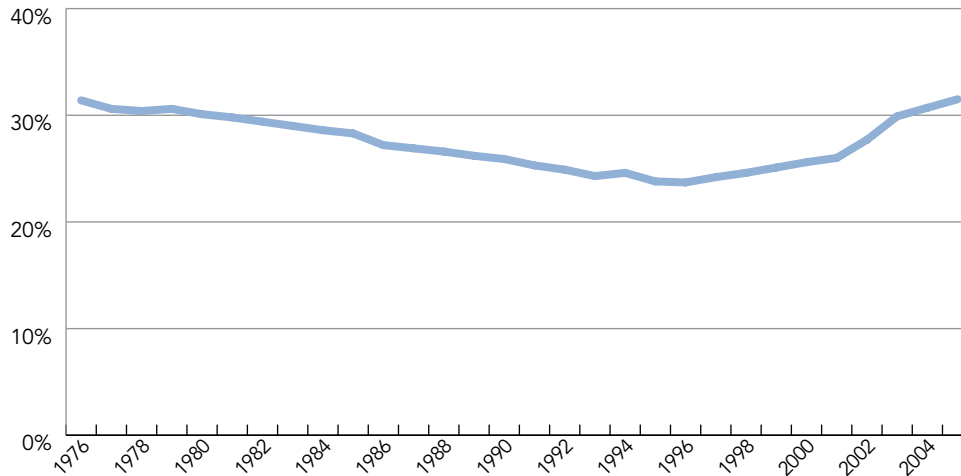
## Why should seniors keep learning?

Canada's population is aging rapidly. The trends and projections illustrated in Figure 2 indicate that approximately 13% of Canada's population currently consists of people aged 65 and over. By 2031, seniors will make up 23% to 25% of Canada's population. According to current projections, senior citizens will outnumber children in approximately 10 years.

### Quality of Life

As the population ages, finding ways to maintain quality of life well into the senior years is becoming increasingly urgent. Maintaining healthy mental faculties is a crucial challenge. Mental acuity can begin to deteriorate as a result of age-related physiological changes in the brain. According to brain research, age alters the structure of the brain: overall brain mass shrinks modestly in some people beginning around the age of 60 or 70. The cortex also undergoes modest thinning and the brain's white matter decreases, influencing the transmission of signals between different regions of the brain. Neurotransmitters, the chemicals that relay messages from neuron to neuron in the brain, become less available with age and this may play a role in declining memory among older adults.<sup>3,4</sup>

**Figure 2:**  
Labour force participation rates among those aged 55+



Source: Statistics Canada, Labour Force Historical Review

The good news is that age-related brain function loss is not a necessary outcome of aging: the effects of changes within the brain can be moderated by environmental factors, such as intellectual stimulation. Formal education, leisure activities, and professional pursuits can all contribute to keeping the mind stimulated and healthy. “We can make the brain work better simply by accumulating more knowledge, which builds more networks of connections in the brain...the wisdom that we acquire can compensate for the decline that may be gradually occurring,” says neurobiologist Dr. James McGaugh.

Active learning carries benefits that go beyond alleviating age-related loss of brain function. Engaging in active learning also provides a means for remaining actively involved in the community, for developing new interests and for keeping up with younger generations. In short, people feel healthier, happier, more respected and more independent when they pursue active learning in their senior years.<sup>5</sup>

### Contribution to society

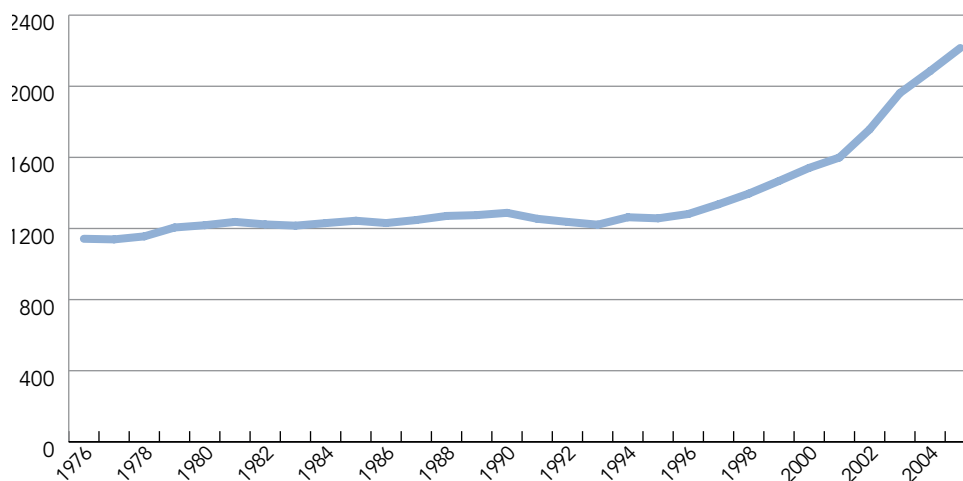
#### *Stay in the workforce longer*

Statistics Canada reports that more seniors are working today than in the past. In year 2001, over 300,000 Canadians aged 65 or more were employed. This means one in 12 seniors was still working after the generally recognized retirement age. Labour force trends over the last 30 years indicate that, while Canadians aged 55 and over were progressively less likely to remain active in the labour force during the 1980s and 1990s, in recent years this age group has seen a sharp increase in the labour force participation rates. By 2005, the participation rate among those aged 55 and older had hit a 30-year high (Figure 2).

In addition, though employment rates for this age group remained relatively stable during the 1980s and 1990s, they have been increasing in recent years. When

combined with the fact that Canada’s proportion of older adults is increasing, the number of employed Canadians aged 55 and older has increased dramatically over the last few years (Figure 3).

**Figure 3:**  
Number of Canadians aged 55+ who are employed



Source: Statistics Canada, CANSIM

Insightful employers who are mindful of the possibility of impending labour shortages have begun to acknowledge the value of hiring and retaining older workers. Older workers tend to be very reliable and hardworking, and are often more willing than their younger counterparts to work irregular hours.<sup>6</sup>

**Table 1:**  
Adult population participating in education and training

Age	%	Mean hours of study <sup>a</sup>	Job-related %	Personal interest %	Employer-sponsored <sup>b</sup> %	Non employer-sponsored %
17-24	39.5	451	30.8	12.9	25.0	22.5
25-34	38.6	272	30.6	12.6	24.1	21.7
35-44	33.6	157	27.3	10.5	25.5	15.1
45-54	30.3	106	23.7	10.2	25.7	12.2
55-64	14.6	49	8.4	7.6	14.4	7.8
65+	5.0	43	0.5	4.5	5.0	4.5

a. Mean hours of education and training per participant  
b. Employed adult population only

Throughout the 1990s, data indicated that significantly fewer workers aged 55 and over participated in adult education and training than did younger workers.<sup>7</sup> The data also suggest that workers approaching retirement age tend to regard work-related learning as less important, aside from the fact that they are offered less support from employers (See Table 1). More recent data suggest that increasing numbers of older workers are beginning to pursue work-related training further into their careers. For those workers who do so, further learning enhances their contribution to the workforce.

#### *Enhance volunteer work*

*“The best way to find yourself, is to lose yourself in the service of others.”*  
—Mahatma Gandhi

Canadian seniors make significant contributions to society through volunteerism. Statistics Canada reports that nearly 25% of all people aged 55 and over volunteer through officially-recognized volunteer networks, government and non-governmental organizations.

In addition nearly two thirds of people in this age group volunteer informally. For example, the Public Health Agency of Canada reports that approximately 500,000 Canadian seniors provide unpaid care to other seniors and 400,000 provide such care to children.

As with paid work, volunteer work is enhanced by formal or informal learning experiences. To be able to serve others better, training for volunteerism is sometimes necessary. Senior volunteers may need to learn new interpersonal and professional skills as well as time-management skills.

#### *Are seniors learning?*

Senior enrolment in education has risen significantly in Canada over the past two or three decades. For instance, from 1980 to 1991, participation in educational activities organized by Creative Retirement Manitoba increased from 200 to 3,000.<sup>8</sup> A recent poll by The Canadian Network on Third Age Learning revealed that over 60,000 older adults are actively involved in lifelong learning programs. Many educational institutions are responding to the learning needs of the growing population of learning-inclined seniors. Credited and non-credited courses, seminars, workshops and learning tours are offered in colleges, universities and other educational institutions across Canada.

Additionally, data from the Adult Education and Training Survey (AETS) show more workers aged 55 to 64 are receiving formal job-related training now than ever before. Between 1997 and 2002, participation rates among older adults rose from 15% to 23%, and the average amount of training time older workers received increased from 43 to 88 hours per year.<sup>9</sup>

Formal education is not the only approach to learning. Many seniors pursue academic and artistic interests within informal learning contexts. “Virtually all Canadian adults are active learners and very little of this learning is registered through specific education and training courses,” writes David Livingstone, Canada Research Chair in Lifelong Learning and Work.<sup>10</sup> Recent research

indicates that older adults spend considerable time learning and most of that learning is of the informal variety.<sup>11</sup> In research conducted at the University of British Columbia, 332 senior participants aged 55 to 91 reported taking part in 36 learning activities yearly, including reading books (48.1%), watching educational television (46.1%), reading magazines or newspapers (45.6%), travelling (42.3%), participating in discussions with family and friends (41.9%), participating in senior centre activities (33.2%), watching the news (29.0%), observing nature and life (27.8%), visiting libraries (22.4%) and listening to the radio (20.7%).<sup>12</sup>

Although seniors are participating in lifelong learning in growing numbers, there still remains room for growth. Work-related training and enrolment in educational institutions remain predominantly the domain of younger adults. Additionally, data from the New Approaches to Lifelong Learning survey of informal learning in Canada confirms that time spent on informal learning declines from early adulthood onward.

*What barriers to learning do seniors encounter?*

*“Population aging is one of humanity’s greatest triumphs. It is also one of our greatest challenges.”*

—WHO, Active Aging: A Policy Framework, 2002

Lifelong learning is important to individuals as they grow older and to Canada as a whole as the population ages. However, seniors often encounter a particular set of barriers in their attempts to pursue learning opportunities:

1. Fewer learning opportunities are available to seniors than to their younger counterparts.

Older adult workers receive less on-the-job training than their younger counterparts. Data from the Adult Education and Training Survey indicate that workers aged 55 and over participate in significantly less adult education and training than do younger workers.<sup>13</sup> In addition, these older workers receive substantially less employer-supported training than do younger workers (Table 2).

**Table 2:**  
Workforce age data in Canada from Census 2001

Age Group	1991	1993	1997	
17-24	20.7	18.2	27.8	(2.0)
25-34	27.7	27.0	26.1	(1.1)
35-44	29.3	29.6	27.4	(1.0)
45-54	21.5	27.1	27.3	(1.1)
55-64	12.9	15.9	15.5	(1.3)
65+	5.3*	5.2*	6.1*	(2.2)
All Ages	24.5	25.7	25.6	(0.5)

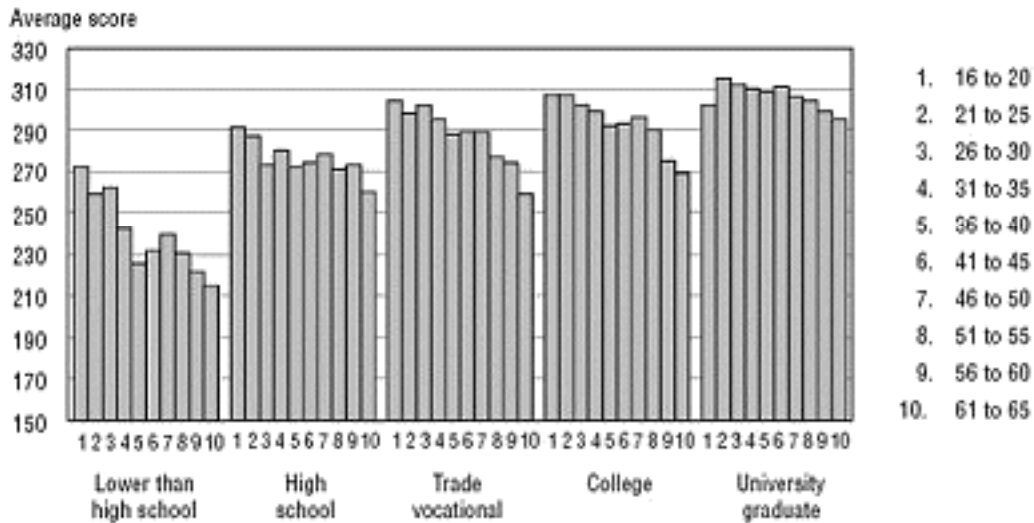
\* Unreliable estimate.  
1. An individual is considered to be employed if his/her labour force status in the week prior to the survey was “employed”.  
Source: A Report on Adult Education and Training in Canada Statistics Canada, 2001

2. On average, seniors have lower literacy skills and less prior education.

Literacy skills are often a prerequisite to participation in learning activities. According to the results of the 1994 International Adult Literacy Survey, adults with stronger literacy skills are more likely to participate in education and training.<sup>14</sup> However, among Canadians, there is a large gap between the literacy skills of older adults and those of younger adults. In the 2003 International Adult Literacy and Skills survey, only 18% of adults over 65 reached the literacy threshold considered adequate for “coping well in a complex knowledge society,” while 67% of adults aged 26 to 35 reached this level.<sup>15</sup> It is unclear whether age differences in literacy skills result from generational differences or the effects of aging—though both factors likely play a role. What is clear is that inadequate literacy skills are a greater barrier to further learning for seniors than for younger adults.

Prior education also plays an important role in learning. Adults who have higher levels of previous education are more likely to engage in further learning. In Canada, adults with a university degree are 7.5 times more likely to participate in further learning than those without a high-school diploma.<sup>16</sup> Prior education may also present a barrier to learning of particular concern to today’s seniors because, when compared to younger age groups, they generally have lower levels of education credentials (See Figure 4).

**Figure 4:**  
Average prose scores, by educational attainment, age group



Note: This figure contains certain unreliable estimates. Consult the table 2.10 in Annex A of the standard error of each estimate.

Source: International Adult Literacy and Skills Survey, 2003

### 3. Illness and disability

Age-related illnesses and disabilities can prevent seniors from pursuing learning activities. Fortunately, today's Canadian seniors are healthier than their predecessors and, in a survey conducted in the mid-1990s, a large proportion of senior citizens rated their health as good to excellent. However, in the same survey 75% of Canadians aged 55 and over (4.3 million people) complained of chronic pain or discomfort and approximately one in six reported that health conditions kept them from their daily activities.<sup>17</sup>

### 4. Declining cognitive skills

Age-related memory decline can affect the learning and retention of new information.<sup>18</sup> For older adults, learning requires more time and repetition; multi-tasking becomes more difficult; forgetfulness becomes more common; and the ability to think abstractly declines, as does the ability to maintain concentration over a period of time.<sup>19,20</sup> These cognitive challenges can cause frustration for seniors and deter them from participating in learning activities.

### 5. Dealing with new technology

The National Advisory Council on Aging (NACA) has argued that technology has great potential to enhance seniors' independence and social participation. Older adults are one of the fastest-growing groups of consumers purchasing computer-related products and services. However, seniors tend to adopt new technologies at a slower rate than other age groups. Although many seniors are discovering and making full use of the technologies, many more are struggling to gain access. Recent research has largely debunked the myth that seniors are, on principal opposed to—or afraid of—technology. However, technologically advanced products and services are rarely designed with any consideration for the particular needs of older adults. As a result, seniors are often sensibly wary of these technologies and may encounter difficulties in adopting them.<sup>21</sup> Given the potential for computers and the internet to alleviate other barriers such as mobility or transportation, becoming familiar and comfortable with technology can open up many otherwise inaccessible learning opportunities.

## What are some possible solutions to these barriers?

Because of the unique characteristics of this age group, seniors have special needs when pursuing learning opportunities. To improve the state of learning among seniors, the joint efforts of researchers and policymakers along with seniors and their families and communities will be required.

Current research within the area of seniors and learning is relatively limited. In particular, more research is needed on the factors that hinder learning in older adults, as well as on the specific learning needs and capabilities of seniors. In addition, more research is needed on technologies that can enhance seniors' learning, such as audio/visual assistance technologies and educational software.

Policy-makers, in collaboration with educational institutions, can help to increase the availability of learning opportunities for seniors. In the 1960s and 1970s, Canadian and American universities introduced tuition-waiver policies for older adults. Many universities in both countries adopted these policies, but, in Canada there has been a growing trend over the past decade to discontinue or reduce these tuition-waiver programs.<sup>22</sup> Unlike the United States, there is no legislation in Canada enacting tuition-waiver or reduction programs. Policy-makers can also work with employers to promote work-related learning opportunities for older workers.

For seniors themselves, understanding that no one is ever too old to learn is the basis for pursuing lifelong learning. How seniors perceive themselves, their abilities and their goals has a significant impact on their willingness to pursue lifelong learning. Support from family and the community can also enhance senior learning. Family members can provide emotional and practical support to help seniors overcome barriers to learning, and communities can help seniors by developing specialized services, such as geriatric assessment programs, and by providing accessible learning opportunities.

According to the OECD's recent report on aging, Canada is better prepared to meet the challenges of an aging population than many other OECD countries<sup>23</sup>. As a result of recent changes, Canada's government pension plans are financially sustainable and the labour force situation of older Canadians has improved. We can further strengthen our ability to meet these challenges by enhancing the state of seniors' learning in Canada, for example by surveying seniors on their formal and informal learning, supporting employers, educational institutions and communities in their efforts to provide learning opportunities for seniors, and by supporting lifelong learning at every phase of life.

## References

- <sup>1</sup> AARP. (2000). AARP Survey on Lifelong Learning. Washington, DC.
- <sup>2</sup> Fisher, M. (2003). Informal Learning of Seniors in Canadian Society. NALL Working Paper, Toronto: New Approaches to Lifelong Learning (NALL).
- <sup>3</sup> Merzenich, M. (2005). "Change minds for the better," *The Journal on Active Aging*, pp. 22-30.
- <sup>4</sup> Dana Alliance for Brain Initiatives. Staying Sharp: Learning Throughout Life.
- <sup>5</sup> Fisher, Informal Learning.
- <sup>6</sup> Lamdin, L, & Fugate, M. (1997). *Elderlearning: New frontier in an aging society*. Phoenix, Ariz: American Council on Education & Oryx Press.
- <sup>7</sup> Statistics Canada and Human Resources Development Canada. (2001) *A Report on Adult Education and Training in Canada: Learning a Living*. Statistics Canada catalogue no. 81-586-XIE.
- <sup>8</sup> National Advisory Council on Ageing: Ageing Vignettes.
- <sup>9</sup> Peters, V. (2004). *Working and training: First results of the 2003 Adult Education and Training Survey*. Statistics Canada catalogue no. 81-595-MIE.
- <sup>10</sup> Livingstone, D. W. (2000). *Exploring the icebergs of adult learning: Findings of the first Canadian Survey of informal learning practices*. NALL Working Paper # 10, Toronto: New Approaches to Lifelong Learning (NALL).
- <sup>11</sup> Lamdin, Elderlearning.
- <sup>12</sup> Clough, B. (1992). "Broadening perspective on learning activities in later life," *Educational Gerontology*, 18, pp. 447-495.
- <sup>13</sup> Statistics Canada and HRDC, *Learning a Living*. Catalogue no. 81-586-XIE.
- <sup>14</sup> HRSDC (1997). Highlights from the Second Report of the International Adult Literacy Survey: Literacy Skills for the Knowledge Society.
- <sup>15</sup> Statistics Canada and Human Resources and Skills Development Canada. (2003) *Building on our Competencies: Canadian Results of the International Adult Literacy and Skills Survey*. Statistics Canada catalogue no. 89-617-XIE
- <sup>16</sup> Statistics Canada and HRDC, *Learning a Living*. Catalogue no. 81-586-XIE.
- <sup>17</sup> Statistics Canada. Excerpts from the Canada Year Book 1999.
- <sup>18</sup> Wagner, J. (Oct 2001). "Patient education: Teaching older adults," *Advances for Nurses*, pp.13-15.
- <sup>19</sup> Merzenich, M. (2005). "Change minds for the better," *The Journal on Active Aging*. 22-30.
- <sup>20</sup> Dana Alliance for Brain Initiatives. Staying Sharp: Learning Throughout Life.
- <sup>21</sup> National Advisory Council on Aging. Writing in Gerontology: Seniors and Technology.
- <sup>22</sup> Gordon, T. (2003). "Tuition-waiver policies for older learners in university courses: Past practices, current developments and future prospects," *The Canadian Journal of Higher Education*. 33(2), pp.57-80.
- <sup>23</sup> OECD. Ageing and Employment Policies: Canada.