HOW OLDER ADULTS USE VIRTUAL PERSONAL LEARNING NETWORKS TO SUPPORT INFORMAL, SELF-DIRECTED LIFELONG LEARNING GOALS: A RESEARCH PROGRAM DESCRIPTION

Dirk Morrison

University of Saskatchewan, Saskatoon, SK, Canada

ABSTRACT

This short paper will describe the details of a SSHRC/IDG-funded research program currently underway (2015-2016) that will investigate how older adults (65+) use Web 2.0 tools and Internet-based resources to establish and expand their virtual personal learning networks (PLNs) for the purposes of enriching their expertise and knowledge within the framework of their particular informal, self-directed learning goals.

KEYWORDS

Older adults; lifelong learning; virtual PLNs

1. INTRODUCTION

Global census data indicate a rapidly growing demographic trend: the percentage of older adults (age 60 and older) will rise in developed countries from 22% of the population in 2010 to 29% in 2030 (World Economic Forum, 2012). The Canadian context is parallel, with predictions indicating that 23.6% of the population will be over the age of 65 by 2030 compared to 15.3% in 2013 (CBC News, 2014; Kembhavi, 2012). Accompanying these demographic shifts are some sobering implications for society, including diminished quality of life for a large portion of the population and increased demands on human services. It follows that an important consideration for any society facing such challenges will be to identify and understand factors that favourably impact the mental and social well-being of older adults (Pike, 2011; Hare, 2014). While successful aging is multidimensional, the research is clear: maintenance of high cognitive function, sustained social engagement and the pursuit of meaningful activities are essential factors that contribute to our mental and social well-being as we age (Rowe & Kahn, 1997). Notably, *informal, self-directed lifelong learning* provides an effective conduit to achieve mental and social well-being; Merriam and Kee (2014) claim "learning in older adulthood not only reduces dependency on government-funded social services but actually enhances personal and community wellbeing" (p. 133). While sufficient evidence exists linking lifelong learning to increases in both social capital (Field, 2009), we have a very limited understanding about how older adults have transitioned to using Web 2.0 technologies to become more knowledgeable and socially engaged. This proposed research aims to explore how older adults use Web 2.0 tools to create and maintain personal learning networks (PLNs) to enhance their personal and community wellbeing.

2. DESCRIPTION OF RESEARCH

2.1 Research Context

2.1.1 Older Adults' Online: Informal Lifelong Learning

While it is true our concept of lifelong learning for older adults needs to incorporate all types of learning, Merriam and Bierema (2014) claim: "most adult learning is through non-formal and informal means" (in

Merriam & Kee, 2014, p. 138). Non-formal learning includes structured but non-credentialed educational events or programs sponsored by community, civic, and voluntary organizations (e.g., Diabetes Society offering screening and nutrition education). Informal learning is that which occurs in one's day-to-day living, and includes incidental learning but, importantly, also includes more *systematic self-directed learning* activities (e.g., a person designs his or her own learning project with concrete goals and outcomes) (Merriam & Kee, 2014). Older adults tend to meet a wide range of learning needs (e.g., health and wellness, leisure, personal interests, 21st century computer and media literacy, etc.) via informal and self-directed methods. Evidence shows that, contrary to stereotypical perceptions of this phase of life, the majority of older adults are healthier, more economically independent, increasingly "computer-savvy" and that they actively pursue lifelong learning opportunities to enhance their lives (Kembhavi, 2012; Sadler & Krefft, 2008; Seals, et al, 2008) or to "make meaning" of their lives (Fisher & Wolf, 2000, p. 483). Dench and Regan (2000) found that the most important reasons older adults gave for engaging in learning activities were *intellectual*: learners reported wanting to increase their knowledge, keep their brains active, enjoy the challenge of learning new things and learn about something they had always been interested in and for personal satisfaction (p. 1). An additional finding from the above research was that 80 percent reported a positive impact of learning on at least one of the following areas: their enjoyment of life, their self-confidence, how they felt about themselves, satisfaction with other areas of life and their ability to cope (p. 4). While such evidence is encouraging regarding the potential impact of lifelong learning activities on older adults' mental, physical and social well-being, there is a paucity of research regarding older adult learners' adoption and adaptation of Internet-based learning tools, techniques and resources that support informal, self-directed lifelong learning goals. Field (2000) warns us to not neglect such groups, risking exclusion, inequalities and erosion of human capital, and instead argues that we must embrace this widening participation in a learning society. This research proposes to investigate how older adults *expand* and *enrich* informal, self-directed lifelong learning goals via the creation, expansion and engagement of their personal learning networks (PLNs) using Web 2.0 tools.

2.1.2 Research Objectives

The specific objectives of this research, followed by associated questions, are as follows:
Objective 1: To investigate and describe older adults' personal learning networks (PLNs):
What Web 2.0 tools are included in the PLNs?
How do they create their PLNs?
Who they are connected to in their PLNs?
What resources are used and exchanged in their PLNs?
Objective 2: To investigate and describe older adults' informal, self-directed learning processes:
What are their motivations for learning?
How do they set learning goals?
How do they manage their learning (both content and process)?
How do they communicate with others in the process of learning?
What are the impacts of PLNs on their informal, self-directed learning?
What are the impacts of these informal self-directed learning efforts on their personal and community well-being?

2.1.3 Theoretical Approach

This research draws upon a variety of theoretical constructs, conceptual frameworks and application contexts. Given the older adult demographic of this study, the use of adult learning and transformation theory (Baumgartner, 2001; Knowles, Holton, & Swanson, 2011; Meizirow, 2012), especially as it relates to informal, self-directed learning (Brookfield, 1985; Candy, 1991; Merriam, 2001; Marskick & Watkins, 2002) will be informed by a complementary background of theory and research specific to ageing and gerontology (Fishback, 1988/1999) to add power to analyses and interpretation of the data. In addition, because this research will investigate the use of Web 2.0 information and communication technologies, it will rely on current theory and best practices gleaned from Internet-based learning (Hill, Wiley, Nelson & Han, 2003) and social media applications in education (Hung & Yuen, 2010) to organize, synthesize and evaluate the findings. Finally, drawing on social capital theory as a component of the conceptual framework of this study, "the proposition that networks of relationships are a resource that can facilitate access to other resources of

value to individuals or groups for a specific purpose" (Balatti & Falk, p. 282) will ground examination of older adults learning together in online environments.

2.1.4 Methodology

The proposed program of research will utilize a mixed methods approach, with the collection and analysis of relevant qualitative and quantitative data from a representative sample of 384 Canadian older adult learners, 65 years and older, who use Web 2.0-based personal learning networks to support their informal, self-directed learning projects. These participants will be invited to complete an online survey.

To be included in the study, participants will: a) have had at least one online learning experience, b) have experience in using one or more Web 2.0 learning tools, such as PLNs, c) be willing to participate in the full research project, and d) be age 65 or older. Demographic data such as gender, time since retirement, marital status and level of educational attainment will also be gathered by the full online survey but will not influence selection for participation.

Phase 1 of this research will address Objective 1: To explore and describe older adults' personal learning networks (PLNs). The Principal Investigator (PI) and one qualified Master's-level graduate student will work directly with the University of Saskatchewan's Social Sciences Research Lab (SSRL) to design and construct an online survey, using the *Qualtrics* Online Survey Programming tool. Survey questions will be designed to address the questions outlined under Objective 1 listed above. The team will also consult with members of the Computers and Technology Lifelong Learning Program of the *Saskatchewan Council on Aging (SCOA)*, to solicit feedback regarding the survey instrument questions.

Following the distribution and completion of the national online survey, analyses will include quantitative data and qualitative data.

Phase 2 of the research will address Objective 2: To investigate and describe older adults' informal, self-directed learning processes. This phase of the research will include 10 in-depth, online focus groups, consisting of five participants each, designed to examine participants' qualitative descriptions of methods employed and tools used (e.g., Web 2.0) and perceptions of the relative value of these (e.g., PLNs) in support of their informal, self-directed learning goals.

2.1.5 Data Analysis and Interpretation

The rich variety of quantitative and qualitative data collected via the national survey and focus group interview transcripts across the two phases of research will be analyzed and interpreted with the goal of thoroughly and accurately describing older adults' use of PLNs to achieve their informal and self-directed lifelong learning goals. Data analyses will be supported by a variety of tools and processes available to the researcher and graduate students such as participant *interaction mapping* and social network analysis methods. Focus group interview data will be organized, managed, and coded using the qualitative analysis software *NVivo™* enabling a detailed, rich content analysis, and the discovery of complex relationships among and between these rich data sets.

3. CONCLUSION

This research explores older adults' use of Web 2.0-enabled *personal learning networks* (PLNs) for the purposes of *informal, self-directed learning* and data from this new research will enable a rich analysis, both of the longer-term impact of PLNs on older adults, and of the relationship between individual use of PLNs and their general wellbeing. Non-profit and government-sponsored organizations whose mandate it is to serve the social and lifelong learning needs of older adults (e.g., The Saskatchewan Council on Aging, Saskatoon, SK; Saskatchewan Senior Centre, Regina, SK etc.) could use such findings to better inform their programming initiatives.

ACKNOWLEDGEMENT

REFERENCES

Balatti, J., and Falk, I. (2002). Socioeconomic contributions of adult learning to community: A social capital perspective. *Adult Education Quarterly*, *52*(4), 281-298.

Baumgartner, L. M. (2001). An update on transformational learning. *New Directions for Adult and Continuing Education: Special Issue: The new update on adult learning theory, 1(89)*, 15-24.

Brookfield, S. (1985). Self-directed learning: From theory to practice. San Fransisco, CA: Jossey-Bass.

Candy, C. P. (1991). Self-direction for lifelong learning: A comprehensive guide to theory and practice. San Francisco, CA: Jossey-Bass.

CBC News: Business (2014). Canada's seniors population to jump, workforce decline by 2063. September 18, Retrieved November 29 from: http://www.cbc.ca/news/business/canada-s-seniors-population-to-jump-workforce-decline-by-2063-1.2770359

Dench, S. and Regan, J. (2000). Learning in later life: Motivation and impact. Department for Education and Employment Research Brief No. 183, Brighton, UK: Institute for Employment Studies. Retrieved November 30, 2014 from: http://www.employment-studies.co.uk/pubs/summary.php?id=rr183

European Commission. (2006). Key competencies for lifelong learning. Retrieved from: http://europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11090_en.htm

Field, J. (2000). *Lifelong learning and the new educational order*. Trent, UK:Trentham Books, Ltd.

Fisher, J. C., and Wolf, M. A. (2000). Older adult learning. In A. L. Wilson & E. R. Hayes (Eds.), *Handbook or adult and continuing education* (pp. 480-492). San Francisco, CA: Jossey-Bass.

Hill, J. R., Wiley, D., Nelson, L. M., and Han, S. (2003). *Exploring research on Internet- based learning: From infrastructure to interactions*. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology* (pp. 433–460). Mahwah, NJ: Lawrence Erlbaum.

Hung, H. T., and Yuen, S. C-Y. (2010). Educational use of social networking technology in higher education. *Teaching in Higher Education*, *15*(6), 703–714. [doi:10.1080/13562517.2010.507307]

Kembhavi, R. (2012). Research Note-Canadian seniors: A demographic profile. *Policy and Research, Elections Canada*, Retrieved from: http://www.elections.ca/content.aspx?section=res&dir=rec/part/sen&document=index&lang=e

Fishback, S. J. (1999). Learning and the brain. *Adult Learning*, *10*(2), pp. 18-22.

Knowles, M., Holton, E., and Swanson, R. (2011). *The adult learner* (7th ed.). Oxford, UK: Elsevier.

Marskick, V. J and Watkins, K. E. (2002). Informal and incidental learning. *New Directions for Adult and Continuing Education: The New Update on Adult Learning Theory*, *89*, 25–34

Merriam, S. B. (2001). Androgogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education, 89*, 3–13.

Merriam, S. B. and Bierema, L. L. (2013). Adult learning: Linking theory and practice. San Francisco, CA: Jossey-Bass Higher and Adult Education.

Merriam, S. B. & Kee, Y. (2014). Promoting community well-being: The case for lifelong learning for older adults. *Adult Education Quarterly*, *64*(2), 128-144.

Mezirow, J. (2012). Learning to think like an adult: Core concepts of transformational theory. In E. Taylor & P. Cranton (Eds.), *Handbook of transformative learning: Theory, research, and practice* (pp. 73–95). San Francisco, CA: Jossey-Bass.

Mezirow, J. (1985). A critical theory of self-directed learning. In S. Brookfield (ed.), *Self-Directed Learning: From Theory to Practice. New Directions for Continuing Education, 25,* San Francisco, CA: Jossey-Bass.

X. and Seaton, J. X. (2014). Exploring self-directed learning in an online "do-it-yourself" forum. *International Journal of Self-Directed Learning*, *11* (2), Fall, pp. 29-45

Pike, P. D. (2011). Using technology to engage third-age (retired) leisure learners: A case study of a third-age MIDI piano ensemble. *International Journal of Music Education*, *29*(2), 116–123.

Rowe, J. W. and Kahn, R. L. (1997). Successful aging. *The Gerontologist*, *37*(4), 433–440.

Sadler, W. A., and Kreftt, J. H. (2008). *Changing course: Navigating life after fifty*. San Francisco, CA:Center for Third Age Leadership Press.

World Economic Forum. (2012). Global population ageing: Peril or promise? Retrieved November 28, 2014, from http://www.who.int/ageing/publications/exploding_myths/en/index.html