Enhancing Lifelong Learning and Intergenerational Learning Among Older Adults

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1. Summary

This research is critical to the field of lifelong learning and older adult education, and was developed under the guidance of Mount Royal University's Institute for Community Prosperity and Silvera for Seniors, to explore possible ways to improve older adults participation in lifelong learning and intergenerational learning. My community partner, Silvera for Seniors, is a non-profit provider of a diverse selection of safe affordable housing and services to independent older adults in Calgary with nearly sixty years of service. To ensure that residents age actively and engage in lifelong learning activities, a new program known as 'Silvera Scholar' was launched in 2021. The program was developed in partnership with academic institutes, namingly Mount Royal University (MRU), to ensure residents can engage in learning opportunities in the community and on campus.

My interest in lifelong learning is a direct result of my past nursing clinical experience with residents of Silvera. At the time, I interviewed some of the residents, who were interested in taking some courses, but were unable to do so due to financial constraints. The Catamount program presented the opportunity for me to delve into the issue of non-participation in lifelong learning even with no prior knowledge of it. As I dove into the problem, I chose an upstream approach to explore the root causes and a community consultation was organized involving key stakeholders, residents of Silvera, staff and students of Mount Royal University and other Calgarians.

Due to the COVID-19 restrictions on in-person gatherings, the consultation took the form of a virtual focus group. Information from this engagement and the other data sources were used to analyze the problem and helped me arrive at a solutions landscape. As the world rapidly ages, older adults will likely live longer than previous generations, so it is imperative to recognize the urgency of prioritizing their learning needs, so they can remain as part of the workforce, be active participants in the communities, share their wisdom with others, and maintain their physical and mental wellbeing. This report is a collection of my discoveries regarding older adults' non-participation in lifelong learning and intergenerational learning and includes suggestions for creating sustainable and effective change. Recommendations are also included.

2. Introduction

Lifelong learning is fundamental to a physically, cognitively and socially healthy lifestyle for older adults, with research demonstrating benefits in the following areas; self-satisfaction, coping strategies, self-confidence, social inclusion, civic participation, health and well-being, and resilience to age-related changes in the brain (Boulton-Lewis, 2016). Lifelong learning as a broad concept speaks to many audiences, so this project focuses on lifelong learning regarding older adults 65 and above. Please note that lifelong learning and adult learning are used interchangeably in this report. Globally, for the first time in history, persons aged 65 and above outnumber children under five years of age (Sibai & Hachem, 2021). By the year 2030, the number of seniors will exceed over 9.5 million and make up 23 percent of Canadians (Govt of Canada, Action for seniors report, 2014). With this demographic challenge, one may think that older adults' learning needs will be prioritized as a public policy concern for most governments. In his scan on Aging in the 21st Century, Stauch (2021), highlights the eagerness for lifelong learning as among the five insufficiently acknowledged features influencing the lifestyle of older Canadian adults.

During my nursing clinical placement at Silvera, I engaged with residents by conducting interview sessions, physical and mental assessments, exercise sessions etc. What stood out the most for me were the interviews. They were profound and insightful, bringing me to an empathetic understanding of the pervasive issues of this population. I thought about other non-nursing students, who may lack opportunities for intergenerational exchanges, and are more prone to nurture ageist attitudes as a result. In Canada, the COVID -19 pandemic and the public policies surrounding it exposed the approach to the predicament of older adults, considering that most victims were over 60 years of age (Stauch, 2021). Given that ageism is still deeply embedded in the fabric of society, it is difficult to see and harness the potential of older adults as active citizens and contributors to society.

However, the COVID-19 pandemic also served as an eye opener, revealing the world's level of unpreparedness for change. Bearing in mind the lessons from the pandemic, we need to forge ahead towards a future better equipped to handle daunting changes in every sphere of society.

Beyond the potential for lifelong learning skills to support older adults in remaining active, the challenges associated with increasing life expectancy urgently require new forms of learning (Ogg, 2021). It is now clear that the years spent acquiring formal education is insufficient to equip individuals against the different threats that life presents.

This report aims to highlight and understand the challenges faced by older adults in terms of engagement in lifelong learning, explore existing gaps in government educational policies and programs, examine the role of different stakeholders and make recommendations on how to achieve sustainable change.

3. Research Purpose and Methodology

A fourth year nursing student at Mount Royal University wrote this report, under the supervision of the Catamount Fellowship for Emerging Changemakers. The study aims to explore older adults' non-participation in lifelong learning and intergenerational learning, using a systems lens perspective to discover the dynamics and interconnectedness of the systems at play. The research is situated within a Canadian context, but with implications for a wider range of global settings. Secondary research was conducted using findings and data from academic and non-academic sources. This research is further guided by insights from a community conversation hosted during the program, which comprises a collection of stories from a diverse and multigenerational array of participants, including residents of Silvera for seniors, members of Calgary Association of Lifelong Learners, MRU community, other stakeholders and allies. The event also highlighted the barriers and opportunities to life long learning and intergenerational learning. Systems mapping tools were used to develop and frame the research. The researcher searched online databases, including; google scholar, pubmed, medline, and cinahl, using key words and phrases, including: senior(s) "older adult", elder "lifelong learning", "adult education", "adult learning" , "intergenerational learning", and "Barriers to lifelong learning.

4. Background

As the composition of the global population undergoes rapid changes, lifelong learning is becoming more important (Chae & Kang, 2018). Following worldwide improvements in healthcare and nutrition and declining fertility rates, there are over 700 million people, or 1in 11 persons, above the age of 65. This number will be duplicated by the year 2050, when 1 in 6 people will be above age 65 (UN Department of Economic and Social Affairs, 2019). In addition, the government of Canada, action for seniors report 2014, states that "by the year 2030, the number of seniors will exceed over 9.5 million and make up 23 percent of Canadians.

The World Health Organization (W.H.O) Active Aging Framework, which globally influences aging policies and practices, recognizes that lifelong learning, along with formal education and literacy, is an important factor that facilitates participation, health and safety in the aging process (Ogg, 2021; Choi & Cho, 2021). More so, Molina-Luque et al (2018) revealed two key elements as instrumental in active ageing, and they are: lifelong learning and intergenerational learning. When it became a global policy fifty years ago, the proponents of lifelong learning highlighted that: (1) Learning is not just for child development but a continuum throughout the lifespan and (2) learning is not restricted to the school classroom but occurs in every context (Bjursel, 2020).

According to Choi and Cho (2021), "older adult learning was found to play a key role in health and psychological wellbeing; gaining of new knowledge and skills for adjustment to old age and the rapidly changing world, helping older adults to acquire social and economic resources and improving social relations with same-aged or older/younger peers". Moreover, lifelong learning institutes are proliferating, especially in Europe, North America and Australia (Hansen et al., 2016). Despite the increased opportunities in lifelong learning, many older adults are still not aware or lack accessibility (Ogg, 2021). A survey of 14 European countries found that the average participation rate in education or training courses among those 60-69 years old was 7 percent. Of those 70 years and older, the figure was only 3 percent (Narushima et al., 2017). Research has reported that situational, psychological, institutional and digital barriers prevent older adults from taking advantage of the benefits of Lifelong learning. Therefore, it is important to reverse this trend whereby participation in lifelong learning significantly decreases with age to the point where it is practically absent at advanced ages (Narushima et al., 2017; Ogg, 2021).

By the year 2030, the number of seniors will exceed over 9.5 million and make up:
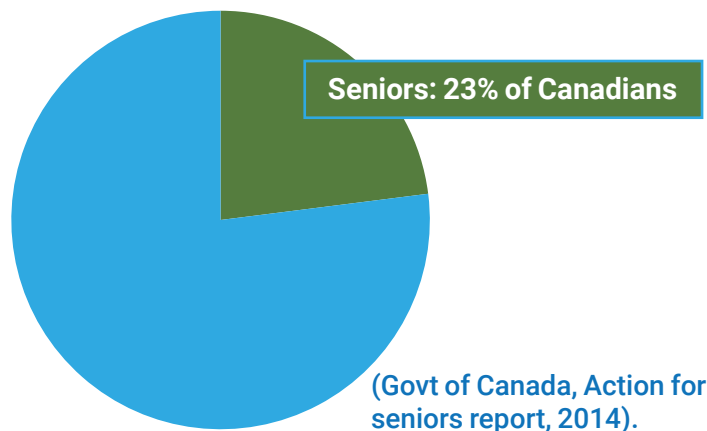
Seniors: 23% of Canadians

(Govt of Canada, Action for seniors report, 2014).

A survey of 14 European countries found that the average participation rate in education or training courses among:

60-69 year olds: 7%   70+: 3%

(Narushima et al., 2017).
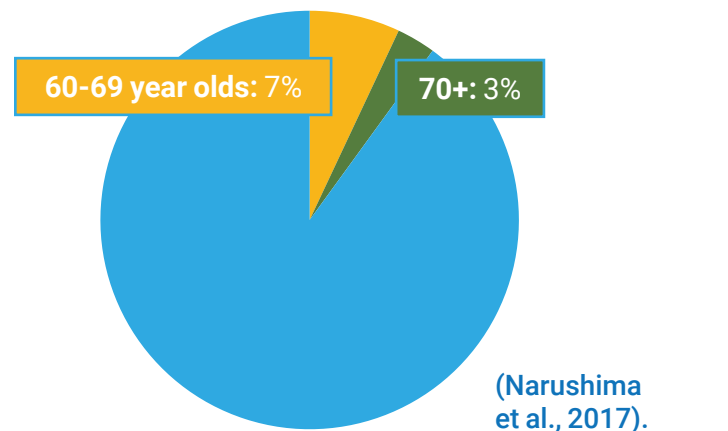
5. What is Lifelong learning?

Definition: Lifelong learning is defined as the ongoing pursuit of knowledge for professional or personal reasons. It covers formal learning taking place in education and training institutions; non-formal learning taking place in non-educational institutions such as the workplace and through the activities of civil society organizations that do not lead to formal certificates; and informal learning which is non intentional learning that is a natural accompaniment to everyday life (Soliman et al., 2019).

In terms of older adults, lifelong learning is a tool that enables an active post-retirement period in order to enhance cognitive mental capacities, prevent dementia, and overcome the intergenerational gap (Hosnjak et al., 2020). It is vital in the maintenance of the competencies and functionality of older adults, contributing to new forms of intergenerational solidarity and learning for as long as possible (Unesco institute for lifelong learning, 2022).

> *Lifelong learning is bigger than adult education, says Jenkins. "Education and learning are very different things. Learning is much broader, more transformative than education. Human learning is about being and becoming. It's a mindset, a process and practice of learning throughout life. It's the silver bullet, part of the human experience. It's tied to individual development, professional advancement, and social advancement. It's an unending process."*
>
> -Paul Jenkins, Manager, Program Delivery.
> University of Manitoba sept 24, 2021

5.1 Why Lifelong Learning Among Older Adults?

> *"[It is] particularly important for those in the latter stages of life when one is less mobile and having to cope with the death of partners and friends: getting out of bed and feeling one has a purpose can be particularly challenging."*
>
> -Professor Stephen McNair

Older adults non-participation in lifelong learning should be explored for the following reasons:

- Overall, life has been separated into three specific phases: learning, work, and retirement. However, it is manifest now that learning is not an independent period of life but a lifelong venture (D2L, 2021). Older adults' participation in learning will encourage society's cultural shift towards learning as a lifelong process.

- There is an under-representation of older adults, and other marginalized groups in adult education. In addition, older adults also experience barriers to accessing lifelong learning opportunities (Unesco institute for lifelong learning, 2019). Investigating their non-participation in learning presents an opportunity to understand the barriers faced by this population, and determines how feasible change can be attained..

- Many older adults are isolated from their families for a wide range of reasons, and the general descent in birth rate signals the increase of smaller family units, with children having fewer interactions with people from other generations including their grandparents (Molina-Luque et al, 2018). As a result, older adults' engagement in lifelong learning will increase their chances of contact with younger generations. Studies have also shown that intergenerational exchanges are among the most effective interventions to reduce ageism against older people (Global ageism report, 2021).

5.2 Intergenerational Learning

The difference between learning and education emerged in the 1980s, and from the year 2000, social capital and social cohesion became associated with lifelong learning. This changed the focus and precedence was given to social relationships. The emphasis on social relationships paved the way for lifelong learning to become linked with inter-generational learning ((Bostrum & Schmidt- Herta, 2017). As population aging flourishes, there will be increased demand for opportunities that boost the pivotal role of seniors as lifelong learners, and cause the extended cohesive attributes of intergenerational learning and its associated values to become increasingly critical (Mariano et al., 2018).

In addition, many researchers have recognized that interactions between people of different generations are key to reducing age discrimination and the social isolation of older people (Canedo- Garcia et al., 2021). Intergenerational learning facilitates a two way transfer of knowledge, expertise, competencies, perspectives, and practice between generations —from the older to the younger ones and vice versa. Also, it allows for the exploration and understanding of other generations' viewpoints without necessarily embracing them (Bostrum &Schimdt-Herta, 2017).

5.3 Motivators for Participation

It is pertinent to consider motivation while reviewing older adults' participation in learning activities, because motivation and participation are closely linked, and participation is presumed to be hinged on motivation (Choi & Cho, 2021). As people age, they are confronted by multiple role changes, which can motivate them to engage in education to inform and support life transitions (Kops, 2020). Loss is often a defining factor for people who take up education later in life. Loss of employment will motivate most older adults between 50 to 65 years of age to retrain, to avoid a loss of income (Boulton-Lewis et al., 2017). Losing a partner inspires many older adults to reinvent themselves, to learn, to interact, to participate in the community and to look for friendship. In general, adults are most motivated when learning is self paced, self directed, reflects past experiences, and relates to life circumstances and real problems (Oecd, 2001).

5.4 Federal and Provincial Programs and Policies

Canada is the only OECD (Organization for Employment Cooperation Development) country without a centralized body in charge of education. Provincial governments oversee education and skills development, plan and establish their own curriculum (Soliman et al., 2021). Learn Canada 2020, the framework that the provincial and territorial ministers of education use through the Council of Ministers of Education to enhance Canada's education systems, learning opportunities, and overall education outcomes did not specifically include older adults learning needs among its objectives. (Learn Canada, 2020).

The provincial governments provide education loans and grants to their respective localities. In Alberta, the adult educational programs category includes: academic upgrading for adults 19 years or younger, academic upgrading for adults 20 years or older, adult language and literacy programs, community adult learning program (CALP), continuing education and the going back to school program (Government of Alberta Alis, 2022). The Alberta government provides funding through CALP to part-time, non-formal establishments within close proximity to a participant's residence. There are about 100 CALP providers in Alberta and programs offered include literacy, numeracy, English language skills, and basic digital skills (Government of Alberta Alis, 2022). Generally, these programs serve adult education needs, but specific programs for older adults aged 65 and above are still lacking.

The role of the Federal Government in adult learning is channeled through programs handled by Employment and Social Development Canada (ESDC). Out of the 23 support programs and subprograms, operated by ESDC, 6 of them cater to adult learners' needs (Soliman et al., 2021). Younger students who follow the conventional education path constitute the greatest proportion of ESDC's clients. As such, the bulk of educational and training resources are channeled towards this demographic. For example, during the 2018-2019 financial year, the average recipient of the Canada Student Financial Assistance (CSFA) program was 24 years old. However, students above 35 years comprised only 10% of total beneficiaries during the same year (Government of Canada, 2019). Another federal program of interest is the Lifelong Learning Plan (LLP), which is supervised by Revenue Canada. The rationale for including this plan under this category is that the LLP is designed to support adult learning by allowing withdrawals up to $10,000 in a calendar year from the (RRSPs) of eligible beneficiaries to finance full-time training or education for them/ spouse / common-law partner (Govt of Canada, 2019). Like many countries, Canada gravitates towards the concept of lifelong learning with programs and policies focused on boosting the skills and expertise of adults. As much as they are vital and laudable, they do not represent the breadth and depth of learning as a lifelong process. (Canadian Council of learning, 2010).

Enabling environment for achieving the vision for lifelong learning by 2050.

STRONG SOCIAL FABRIC
Against poverty, discrimination and inequality

SUFFICIENT FUNDING AND RESOURCE MOBILIZATION
Shared responsibilities for financing

ACCESSIBLE AND WELL-UTILIZED TECHNOLOGY
Open-access digital infrastructures and protection of primary rights

CRITICAL USE OF SOCIAL MEDIA
Counteracting misinformation and promoting collective learning

CULTURAL SHIFT TOWARDS LIFELONG LEARNING
In education systems, institutions and people's minds

CULTURE OF LIFELONG LEARNING

MULTIPLE SPACES FOR LEARNING
Use of existing infrastructure for learning

INCLUSIVE EDUCATION POLICIES
Ensure needs-based planning and programming

COMMUNAL VALUE OF EDUCATION AND LEARNING
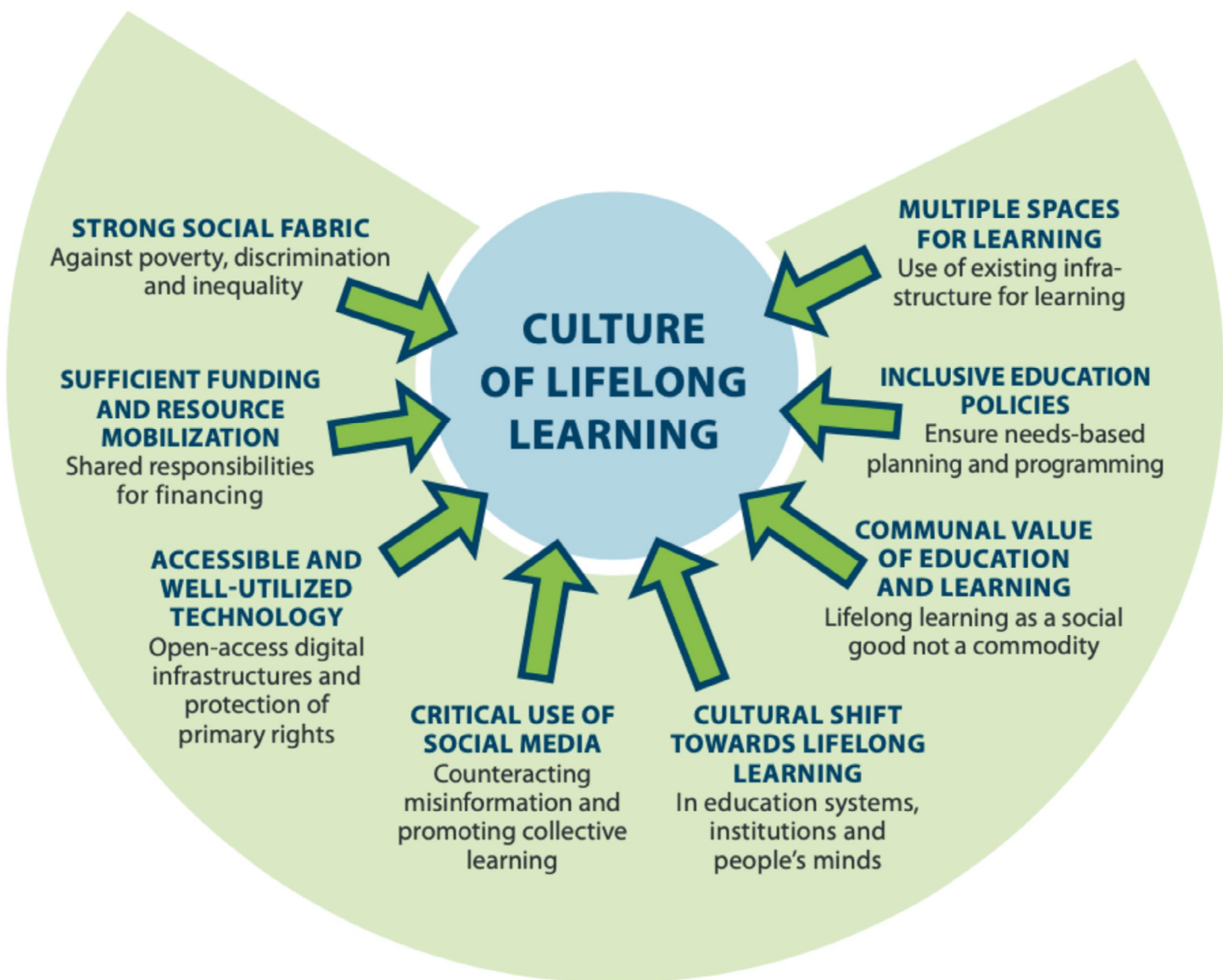Lifelong learning as a social good not a commodity

Figure 1: UNESCO institute for lifelong learning (2020). Embracing a culture of lifelong learning: contribution to the Futures of Education initiative. Page 18.

6. The Barriers

Several researches have identified the different barriers that impede older adults' participation in Lifelong learning. If active aging objectives are to be met for the growing aging population, barriers to their learning need to be comprehensible, to be addressed (Boulton-Lewis et al., 2016).
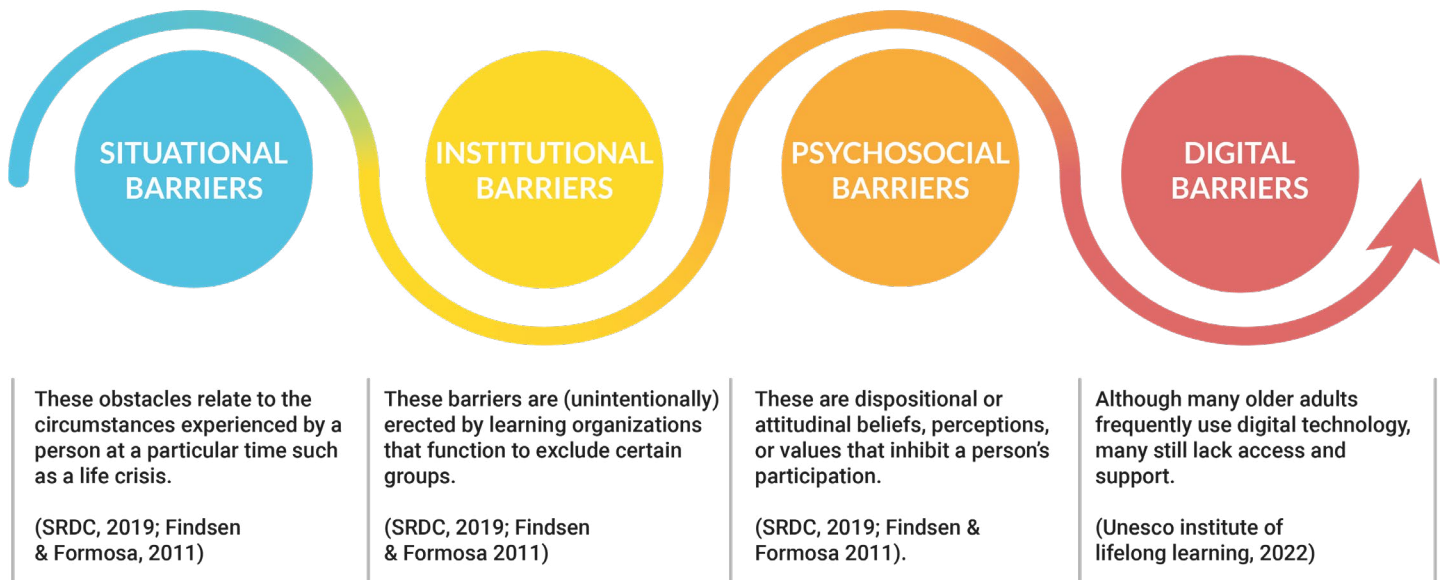
Situational Barriers: These obstacles relate to the circumstances experienced by a person at a particular time such as a life crisis. (SRDC, 2019; Findsen & Formosa, 2011). One study affirms that less educated older adults, with poor health, disabilities, who are unaware of program offerings, lacking motivation and self-confidence, mostly from past negative school experiences rarely engage in later life learning programs (Narushima et al., 2018). Other studies highlight that individuals who engage in lifelong learning activities were mostly financially secure, and within the middle and upper-class group (Findsen & Formosa, 2011; Ratsoy, 2016). In exploring gender bias, women were reported as more likely to identify with the benefits of lifelong learning (Fuentes, 2021). This may be attributable to statistics depicting women as having higher life expectancy than men and constituting a higher proportion of the older adult population (Statistics Canada, 2019). An individual's prior education is another barrier and people with higher levels of previous education are considered more likely to engage in further learning. According to research, Canadian adults with a university degree are 7.5 times more likely to participate in further learning than those without a high-school diploma (Canadian council on learning, 2006). Research also ranked affordability and lack of accessibility (transportation/ disability) high as barriers to participation. The reason being that many older adults live on lower and/or fixed incomes, and their declining physical capabilities and accompanying loss of mobility are age related factors (Kops, 2020).

Institutional Barriers: These barriers are (unintentionally) erected by learning organizations that function to exclude certain groups (SRDC, 2019; Findsen & Formosa, 2011). Examples include prerequisites, inflexible schedules, irrelevant courses, financial cost/tuition, administrative bureaucracy, too much reading/homework. In their submission, Patterson et al (2016) argued that older adults who felt they lacked the qualification to take a particular course were reluctant to participate, while Murphy (2018) implied that seniors impressions of lifelong learning programs, and having tests or past educational prerequisites, may be responsible for non-participation. Although Goulding (2013) agreed that older adults' impressions of their university experience could negatively affect participation, he also portrayed the delivery of the learning experience as a likely barrier. For seniors who may have considered university enrollment, authors Kenny and Davis (2018) ascribed the feeling of not having the appropriate attire to enter the university as a barrier.

Psychosocial Barriers: These are dispositional or attitudinal beliefs, perceptions, or values that inhibit a person's participation. (SRDC, 2019; Findsen & Formosa, 2011). These perceptions have many sources. Some are due to past negative school experiences, or linked to ageism and societal discrimination against older adults. Other examples include feeling too old, fear of competition with younger adults, feelings of isolation, general nervousness about the ability to succeed, and fear of the unknown. Findsen and Formosa (2011) illustrate that educators contend with psychosocial barriers, as it may involve having the expertise to rapidly change other people's attitudes which they maintain is mostly impossible. Other researchers observed non-learners exhibit the "I am old attitude" noting that their perceptions of being old (and forgetful) contributes to pessimism (Thang et., al 2019; Choi & Cho, 2021). Further, Murphy (2018) establishes that nurturing ageist attitudes regarding lifelong learning may emanate from past negative educational experiences. More so, messages transmitted in the community (e.g., through the media) may capture older adults learning as irrelevant, such as "you can't teach an old dog a new trick (Findsen & Formosa 2011). Interestingly, Choi and Cho (2021) illustrate that fear might impede participation, for example the fear of exposing their background, fear of competition with younger adults, fear about the location of learning and fear of the unknown.

Digital Barriers: This research was conducted during the COVID-19 pandemic, which accentuated digital inequality and socially excluded older adults who lack access, skills and knowledge of Information Communication Technology(ICT) from society. Generally, access to digital technology is essential for lifelong learning to thrive. It provides new forums for older adults active engagement in society (Pihlainen et al., 2021). Technology access may enhance involvement in learning for older adults with restricted mobility/ illness or who live far from the physical location of a lifelong learning program (Talmage et al., 2020). Although many older adults are frequent users of information and communication technologies, many still lack access, and the pace of digital innovation is yet to acknowledge their needs. Besides devices and internet connections, effective technology-enhanced learning also depends on learners having the digital literacy skills to benefit from digital resources and educational software (Unesco institute for lifelong learning, 2022). Therefore, older adults need enhanced encouragement to spur them to participate in the process of learning new technologies and to use them continually (Ahmad et al., 2022).

Barriers to Lifelong Learning Among Older Adults

SITUATIONAL BARRIERS	INSTITUTIONAL BARRIERS	PSYCHOSOCIAL BARRIERS	DIGITAL BARRIERS
These obstacles relate to the circumstances experienced by a person at a particular time such as a life crisis. (SRDC, 2019; Findsen & Formosa, 2011)	These barriers are (unintentionally) erected by learning organizations that function to exclude certain groups. (SRDC, 2019; Findsen & Formosa 2011)	These are dispositional or attitudinal beliefs, perceptions, or values that inhibit a person's participation. (SRDC, 2019; Findsen & Formosa 2011).	Although many older adults frequently use digital technology, many still lack access and support. (Unesco institute of lifelong learning, 2022)

Evidence of the benefits of learning during the latter stages of life is overwhelming, from research by the Alzheimer's Society showing delayed onset of the disease, to reduced dependency on welfare support

(Monahan & Clancy, 2011)

6.1 Impact of Non-Participation

Already, older adults contend with inevitable transitions that contribute to erode their self confidence, such as waning of physical condition and mental status, disengagement from active working life, family transitions etc. (Panitslides Papastamatis, 2013). For some older adults, transition to retirement brings serious identity crises associated with other mental health issues, often intensified by weakening of family ties as well as by negative stereotyping. (Panitslides & Papastamatis, 2013). The symptoms older adults encounter are often connected to not having opportunities that keep them actively involved in creative activities and enhance their contribution to society (Panitslides & Papastamatis, 2013).

Non-participation in learning may accelerate the risk of older adults developing dementia. This is due to studies having suggested that lifetime exposure to learning (educational and occupational attainment and leisure activities in later life) increases resilience to age-related brain changes, thereby reducing the risk for development of dementia (Boulton-Lewis et al., 2016).

Participating in learning activities presents opportunities for socializations, cultivating friendships, meaningful relationships etc. Older adults may experience social isolation when they do not engage in learning activities. Social isolation and loneliness have been linked to negative health outcomes, such as depression and anxiety symptoms (National Academies of Sciences, Engineering and Medicine, 2020) and increased risk of hypertension, cardiovascular disease, obesity, cognitive decline, and death (National Institute on Aging, 2019).

6.2 The impact of COVID-19

Globally, the Covid -19 pandemic destabilized the education system. More than 1.6 billion students and millions of people, in formal and non-formal education settings were affected. (Unesco institute for lifelong learning, 2022). Typically, many lifelong learning providers offered educational programs in an in-person format, but with the pandemic, some providers switched to alternative delivery methods, such as the online system. However, centers that lack resources to acquire digital online delivery equipment, especially in rural areas with limited /no high speed internet access, were forced to temporarily shut down. COVID-19 also amplified already existing harmful attitudes like age based stereotyping, prejudice and discrimination (Global report on ageism, 2021).

Overall, the pandemic highlighted the lack of priority given to non-formal adult education and learning, including adult literacy. Nevertheless, it also created the opportunity to reevaluate and reimagine education systems to make them more inclusive and sustainable.(Unesco institute for lifelong learning, 2022).

7.0 Solutions landscape: Emerging System

In exploring the challenges associated with non-participation of older adults in lifelong learning and intergenerational learning using a systems lens perspective, certain leverage points with the potential to positively alter the current situation were identified. They include:

- Enhancing intergenerational solidarity,
- Exploring the gaps in federal policies/ programs,
- Implementing instructional strategies in digital education,
- Promoting age friendly university initiatives and
- Fostering greater diversity among participants.

Stakeholders such as the government, institutions of higher learning, the society, individuals, informal agencies/ civil society groups, and NGOs affiliated with lifelong learning initiatives have vital roles to play.

7.1 Role of Government

To enhance participation in older adult learning, government is responsible for the following: increased stakeholder participation, developing effective monitoring and evaluation systems, strengthening cooperation with civil society, improving inter-sectoral coordination, improving inter-ministerial cooperation, improving transnational cooperation, strengthening capacity-building initiatives, and becoming more decentralized (GRALE, 2019). The principal driver of higher participation rates in learning is government investment. An increase in investment of one percent of GDP is associated with a six percent increase in participation (D2L, 2021). For example, countries in Northern Europe with higher rates of public spending on adult learning, have significantly higher engagement, less accessibility disparities, and better outcomes. (D2L, 2021). Governments recognise the benefits of lifelong learning because they feel the effect across a range of government departments, however, financial resources are directed to the education budget where the needs of formal schools and universities are prioritized. (Tuckett 2017). Knowing the benefits of lifelong learning, governments should incorporate adult education policy into a broad range of public policies.

For example, the European Union's Lisbon strategy, which aims to make Europe the most competitive and dynamic knowledge-based economy in the world, regularly monitors and compares adult learning among member states (European committee of the regions, 2009). Regional formations such as this, inspire governments of member states, supporting them to mainstream education policies into different relevant areas. Finally, to effect change in the delivery of equitable programs, which already is hindered by chronic underfunding, governments must do two things. First, they must supplement their own contribution, and most importantly, they must rally with other stakeholders: the private sector, NGOs, and under certain circumstances, the international community to agree on funding expectations (Unesco institute for longterm learning, 2021).

7.2 Gaps in Existing Government Programs

In Canada, the federal government's notable efforts through ESDC to support adult learners failed to address the barriers that older adults face regarding lifelong learning. None of the ESDC programs include the learning needs of retired older adults. Adult programs mostly target individuals in active employment and few older adults fall under this category. Research indicates "about 14% of Canadians over 65 participate in the labour force, just under the OECD and G7 averages" (Stauch, 2021). A dearth in older adults' educational support programs is indicative that the economy is being positioned over society (Soliman et al., 2021). In addition, the Lifelong learning Plan (LLP) only funds full-time qualifying studies and deprives the learner of the flexibility of self directed learning.

Further, there is the option of committing to a minimum of 10 hrs/week course load and three consecutive months of study (Canada Revenue Agency, 2021). This is equally restrictive for older adult learners, as they are more comfortable with learning on their own terms (OECD, 2001). Governments and adult educators are responsible for establishing clear data collection practices. Finding data that measures older adults' participation in learning was difficult for the researcher. Most available data, including the OECD reports, capture participation rates for adults aged between 25-64 years. Considering the far reaching effects of older adults' learning to the economy and society, governments should rethink their approach, and close longstanding gaps through policy reforms or creation of new programs that align with the needs of older adult learners.
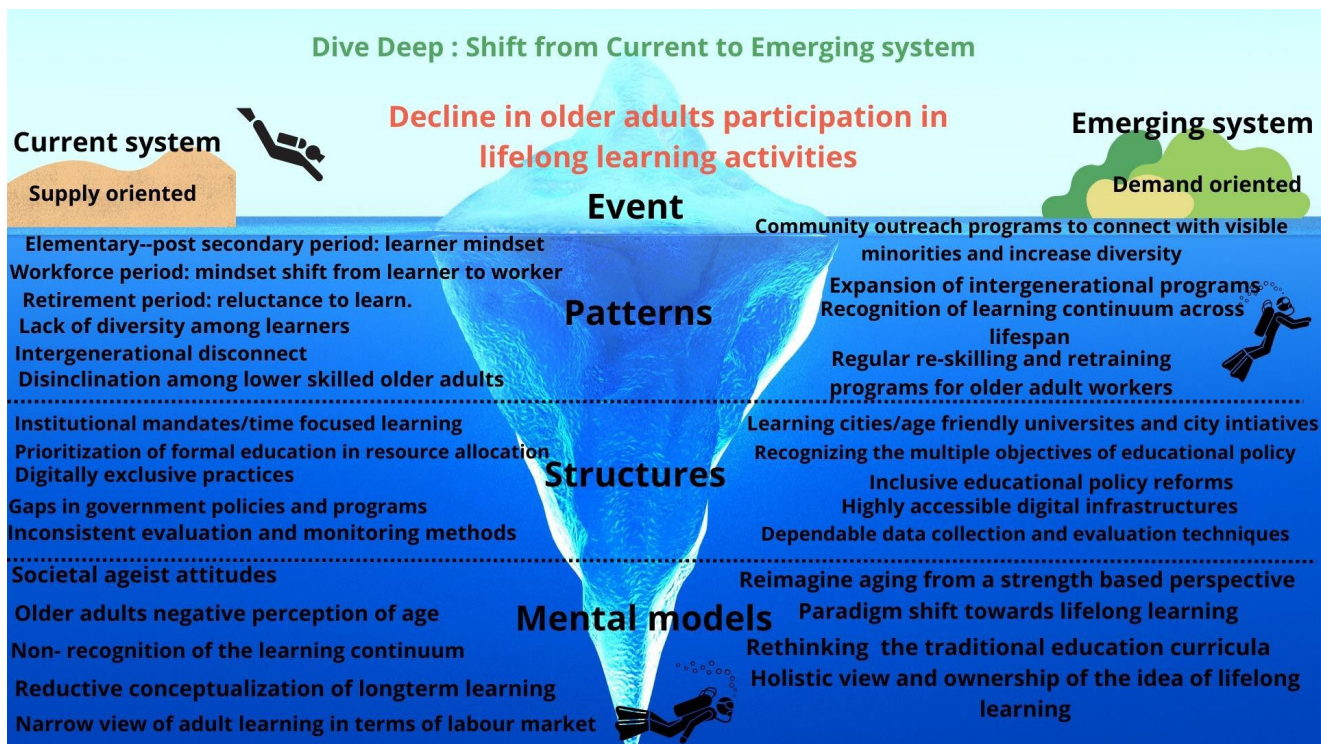
> *When people think of universities, they tend to think of adolescents and young adults, but the world is changing," says Hogan, a professor in the departments of Medicine and Community Health Sciences, University of Calgary.*

7.3 Role of Universities and Other Institutions of Higher Learning

Lifelong learning institutes and programs are one avenue for colleges and universities to become more age-friendly (Talmage et al., 2016). Generally, the belief is that universities and other institutions of higher learning are not designed to address the educational needs of individuals of all ages, except that of youth. However, some universities have been inspired by the Age-friendly World Initiative of the World Health Organization and have adopted the principles of an Age-Friendly University (AFU), which involves ensuring older people feel respected, heard and welcomed to all institutional-related activities. An example is the University of Calgary, in partnership with the Brenda Strafford Center on Ageing. Their Age friendly initiative encourages older adults participation in diverse educational activities and includes the waiver of undergraduate tuition for any full-time University student over the age of 65, among others. (University of Calgary, Brenda Strafford Center on Ageing, 2021).

An international example of a university under the AFU network is the Strathclyde University Glasgow (Scotland), whose robust Age Friendly Academy was launched in 2017 as part of a growing international network of over 50 Age-Friendly Universities, led by Dublin City University and committed to the 10 age friendly university principles (University of Strathclyde Glasgow, 2017) (see Appendix A).

There are multiple approaches to older adult education. Universities should consider the advantages of forming strategic partnerships with community based senior organizations, in engaging and serving the growing older adult demographic (Ratsoy, 2016). An example is the recent partnership between Mount Royal University (MRU) and the Calgary Association of Lifelong Learners, which occasioned the intergenerational Speaker Series program. The intergenerational Speaker Series serves to improve intergenerational connectedness, lifelong learning opportunities, healthy aging and age-inclusivity at MRU. In addition, it promotes the inclusion of diverse groups of seniors and students in planning, implementation and participation. Such partnerships facilitate the building of learning communities on campus and outside of campus. They may take the form of alloting accessible spaces on campus for older adults' engagement, unveiling avenues to access university resources, including lectures, research, outreach programs, intergenerational learning and campus living. Learning communities expedite intergenerational exchanges by providing opportunities for older adults and younger students to regularly interact (Kops, 2020). In the Netherlands, students who live with older adults above 80 years get 100% of their rent reimbursed by the state (Stauch, 2021). An example of a designated space on campus for older adults is the University of Calgary LINKages chapter, a part of the Student's Union clubs program and a co-curricular activity. The program reinforces intergenerational solidarity, fosters age friendliness, and diminishes ageist stereotypes by connecting University of Calgary students and marginalized seniors in the community in mutually beneficial ways (LINKages society, 2022).

Dive Deep : Shift from Current to Emerging system

Decline in older adults participation in lifelong learning activities

Current system
Supply oriented

Emerging system
Demand oriented

Event

Patterns

Elementary--post secondary period: learner mindset
Workforce period: mindset shift from learner to worker
Retirement period: reluctance to learn.
Lack of diversity among learners
Intergenerational disconnect
Disinclination among lower skilled older adults

Community outreach programs to connect with visible minorities and increase diversity
Expansion of intergenerational programs
Recognition of learning continuum across lifespan
Regular re-skilling and retraining programs for older adult workers

Structures

Institutional mandates/time focused learning
Prioritization of formal education in resource allocation
Digitally exclusive practices
Gaps in government policies and programs
Inconsistent evaluation and monitoring methods

Learning cities/age friendly universites and city intiatives
Recognizing the multiple objectives of educational policy
Inclusive educational policy reforms
Highly accessible digital infrastructures
Dependable data collection and evaluation techniques

Mental models

Societal ageist attitudes
Older adults negative perception of age
Non- recognition of the learning continuum
Reductive conceptualization of longterm learning
Narrow view of adult learning in terms of labour market

Reimagine aging from a strength based perspective
Paradigm shift towards lifelong learning
Rethinking the traditional education curricula
Holistic view and ownership of the idea of lifelong learning

Systems Snapshot Diagram: The Iceberg Model

In agreement with the Education 2030 Agenda and Sustainable Development Goal (SDG) 4, inclusive and quality education should leave no one behind. The researcher's interview with the program lead of Calgary Association of Lifelong Learners and insights from the literature review depicts the utilization of lifelong learning mostly by a non-diverse demographic of older adults, leaving out; individuals who are visible minorities, of low socioeconomic status, with little/no prior education, LGBTQs, etc. To recognize their needs and increase diversity, universities and learning administrators should step out of their ivory towers, to understand the racial and ethnic make-up of surrounding communities (Fuentes, 2021). They should reach out to underrepresented groups, while adopting attractive and sustainable learning strategies (Kops, 2020). Examples of outreach programs that drive community and offered by the University of Regina Lifelong Learning Center include the Aboriginal Grandmothers Caring for Grandchildren Support Network, and Intercultural Grandmothers Uniting (Kops, 2020). Initiatives such as these benefit both individuals and their communities and supports universities commitment to drive community engagement (Kops, 2020). Furthermore, universities and adult educators should support the government's efforts by regularly generating dependable data on older adult participation, as well as strive to minimize anecdotal assertions that can limit sector reporting and programme inquiry (Unesco institute for lifelong learning, 2021).

"In many people's lives, older adults are kind of invisible, so, a powerful positive experience personally creates visibility".

- Sara Honn Qualls, PhD, Gerontology Center, University of Colorado, Colorado Spring.

7.4 Role of Other Stakeholders

Participation of stakeholders is accomplished through standardized programmes, committee involvement or adult learning centers, and the synergistic efforts between the government and other key contributors, educators and adult learners (GRALE report, 2019). Stakeholders include individuals, their families, informal /non-formal agencies, civil society groups, non-profits organizations and the numerous NGOs that implement and carry out lifelong learning activities. The Universities of the Third Age (U3A), an example of stakeholders, is a global movement directed at individuals in their third 'age of life' (retired older adults/ members of the community) to advance lifelong learning and life satisfaction (University of the third age, sunshine coast, 2022). Today, there are many community-based learning centers where older adults share and learn from each other, for example the Calgary Association of Lifelong Learners, which facilitates lifelong learning activities for residents of Calgary and environs.

The barrier section of this report highlighted society's ageist attitudes against older adults and older adults' negative subjective feelings about age as major deterrents to learning. However, research illustrates that intergenerational interventions are among the most effective interventions to reduce ageism against older people (Global ageism report, 2021). An example of an intergenerational intervention is the TOY (Together Old and Young) project, which aims to nurture intergenerational relations between children under the age of 8 and senior citizens over the age of 55. It emphasizes lifelong learning programs for older workers and immigrants, and acknowledges the need for EU member states to combat social exclusion, low levels of education, unemployment, and rural isolation. Most importantly, the TOY project improves social solidarity, transmits cultural traditions, reduces age biased discriminations and fosters social cohesion (Molina- Luque et al., 2018). In Sweden, the Färdknäppen co-housing style promotes intergenerational solidarity by bringing together empty nesters between 43 to 97 years old (Stauch, 2021).

Due to fewer formal education opportunities, older adults often enhance their digital skills through non-formal and informal learning settings (Pihlainen et al., 2021). Under the barriers section, access to technology and assistance for older adults when using digital technologies were pinpointed as essential to their participation in learning. To enhance older adults' learning experiences, the application of instructional strategies like game based aids, audio visuals, in addition to reading materials have been found to be effective (Ahmad et al., 2020). Learning digital technologies by playing games is fun, and keeps players involved and at ease. Studies have shown that by playing games older adults with dementia are able to learn Kinect technology. The Kinect device is used for stroke rehabilitation purposes in elderly care, and in gait analysis for neuro degenerative disease therapy (Nadhif et al., 2019). In addition, live video conferencing is also efficient, as it allows live discussions between instructors and learners. However, to improve accessibility, the videos should have bold text and clear images (Ahmad et al., 2020).

An example of an existing and successful international model of a community-based learning centre is the Volkshochschulen (VHS) in Germany. It is over 100 years old with full statistical records for the last 55 years. VHS establishments began as folk high schools in Scandinavian countries and presently provide lifelong learning opportunities to the general public. All VHS receive funding via legislation on state level, support from local government, and fees of participants (Kearns & Reghenzani, 2018).

7.5 Role of Individuals, Family and Community

Older adults' need to realize that the basis for pursuing lifelong learning is the understanding that no one is ever too old to learn. The way they perceive themselves, their goals and abilities significantly impacts their readiness to seek lifelong learning (Canadian council on learning, 2006). Emotional and practical support from family members can help older adults overcome barriers to their learning. Again, the community is a good resource for older adults learning in terms of developing and providing specialized services such as geriatric assessments programs (Canadian council on learning, 2006)). There are a wide range of programs available locally for older adults, offering diverse kinds of activities and support.
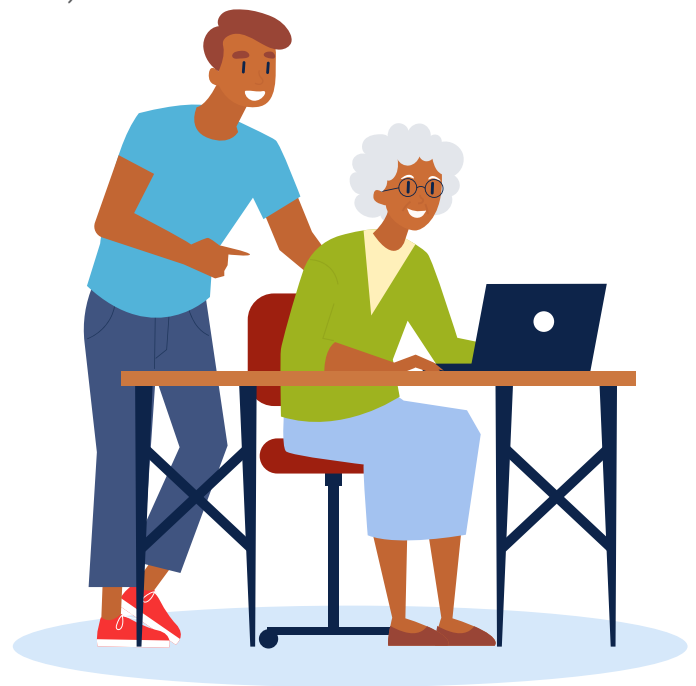
"Changing the narrative around aging is more than just getting people to eliminate obvious ageist language, but also helping them use specific kinds of messages that are proven to shift public perception"

(Janine Vanderburg, initiative manager, Rose Community Foundation, Denver, CO, USA)

8. Recommendations

This project respects the complexity of older adults' non-participation in lifelong learning and intergenerational learning. The following recommendations are not meant to be insistent, but rather as guidelines for action related to the following:

1. **Build movements to change the narrative around age and ageing.**

   This is a call to action for everyone towards taking practical steps to confront and eradicate ageism. Governments, civil society organizations, UN agencies, development organizations, academic and research institutions, businesses and people of all ages should join the movement to change the narrative around ageism (Global ageism report, 2021). The following methods of combating ageism were stipulated by the World Health Organization; reinforcement of policies and legislations that confront age discrimination and inequality towards any age group, supporting interventions against ageism across all levels and forms of education and propagating intergenerational relationships, which is considered among the most efficacious measures for reducing ageism against older adults and the most likely to alleviate ageism against the younger generation (Global ageism report, 2021). Changing the narrative around ageism involves eradicating ageist language, using media campaigns like public speaking, training, blogging, opinion pieces, letters to the editor, earned media, social media and other platforms (Rose Community Foundation, n.d). Framing ageism in terms of confronting injustice is another way to change the narrative around ageism (Rose Community Foundation, 2018). More so, age-friendly healthcare, age-friendly workplace initiatives, anti-ageist birthday cards and intergenerational conversations should be reinforced as ways of reframing aging in the society (Rose Community Foundation, n.d).

2. **Promote transdisciplinary research and intersectoral collaboration.**

   The complicated and interwoven challenges of the 21st century requires a consortium of intelligence from diverse sectors and stakeholders including researchers, policy-makers, Entrepreneurs, educators and learners. It is important to foster transdisciplinary approaches and intersectoral collaboration to harness the potential to create a sustainable future for next generations. To further raise awareness of the relevance of lifelong learning within different disciplines, it is advisable to address learning-related issues beyond the field of education. This will help to raise awareness of the relevance of collaboration efforts, as it is required to achieve a paradigm shift towards a culture of lifelong learning and in support of developing lifelong learning societies (Unesco institute of lifelong learning, 2020).

3. **Position vulnerable groups at the core of policy agenda**

   To promote an inclusive and just society, vulnerable, disadvantaged and disenfranchised groups must be placed at the centre of the lifelong learning policy agenda. This not only affects earmarked policies and instruments, but also integrates this focus in the entire legal, policy, delivery and funding framework. It also supports the United Nations Sustainable Development Goals (SDG), goal #4, which intends to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations 2030 Agenda for Sustainable Development, 2015). As a result, efforts and target actions should focus on counteracting inequalities against individuals excluded from learning opportunities, such as migrants, refugees, older adults, youth and adults at risk, and people with disabilities (Unesco institute for lifelong learning, 2020).

4. **Support local lifelong learning initiatives including learning cities**

   The concept of 'learning cities' is a people-oriented and learning centred perspective, which provides a synergetic, action-oriented structure for working on the various challenges that cities increasingly face. In the community, different initiatives can contribute to this social expression and help to attain a better interpretation of the value of learning: learning cities and villages, learning communities, neighbourhoods and circles, and learning families. The common factor is that they all acknowledge learning as a social practice, which attributes to learning with everyone else and sharing of resources (Unesco institute of lifelong learning, 2020).

9. Conclusion/ Suggestion for Further Research

This is an introductory exploration on the issue of older adults' non-participation in lifelong learning, and intergenerational learning. It does not intend to proffer solutions, but attempts to create an understanding and spark conversations that drive change with existing resources. The researcher encountered difficulty finding statistical data on older adults' (65 years and above) participation in all forms of lifelong learning opportunities. Most data, including the OECD 2021 report, captured activities of adults aged between 25-64 years. However, there is room for ongoing collaboration with stakeholders including educators and government ministries to generate more informative data for the general public. In addition, further research focused on determining appropriate data generation methods for this population is advised.

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Appendix A

10 Age Friendly University (AFU) Principles

- To encourage the participation of older adults in all the core activities of the university, including educational and research programs.
- To promote personal and career development in the second half of life and to support those who wish to pursue second careers.
- To recognize the range of educational needs of older adults (from those who were early school-leavers through to those who wish to pursue master's or PhD qualifications).
- To promote intergenerational learning to facilitate the reciprocal sharing of expertise between learners of all ages.
- To widen access to online educational opportunities for older adults to ensure a diversity of routes to participation.
- To ensure that the university's research agenda is informed by the needs of an ageing society and to promote public discourse on how higher education can better respond to the varied interests and needs of older adults.
- To increase the understanding of students of the longevity dividend and the increasing complexity and richness that aging brings to our society.
- To enhance access for older adults to the university's range of health and wellness programs and its arts and cultural activities.
- To engage actively with the university's own retired community.
- To ensure regular dialogue with organizations representing the interests of the aging population (O'Brien institute for Public Health, Brenda Strafford centre on Aging, University of Calgary).