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Sociology 2259: Asocial Behaviour and Technology - What does this mean for Adult Literacy Programs?

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Asocial Behaviour and Technology

What does this mean for Adult Literacy Programs?

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Introduction

Asocial behaviour is a commonly studied topic across various fields of research, including psychology and sociology. There is a multitude of definitions for asocial behaviour, many of which revolve around shyness, withdrawal from society, fear, and anxiety (Barry et al., 2013). This research will explore asocial behaviour and the benefits and consequences associated with it, the trends in asocial behaviour, the role of technology, and its implications for education and adult literacy programs.

Adult literacy programs refer to the classes and workshops offered to adults to improve their literacy skills. Literacy skills are not limited to reading and writing abilities and can include many other life skills, such as health literacy. This research suggests that the ways people interact and socialize with each other have changed due to advances in society, specifically developments in technology. Therefore, adult literacy programs and education must be delivered in a manner that fits the population's evolving needs.



Asocial Behaviour

What is asocial behaviour?

Current literature indicates that there are three primary motivations for withdrawal (Bowker et al., 2017). According to Bowker and colleagues (2017), this includes:

- Fear or anxiety that leads to shyness
- Dislike of social interactions that leads to avoidance
- Non-fearful preferences of solitude that underlie unsociability

For the purposes of this research, asocial behaviour will be used as an umbrella term to describe individuals that are withdrawn from society with or without fear and anxiety.

(Barry et al., 2013)

It is important to specify that asocial behaviour in this context is not necessarily derived from mental illness but is instead a behaviour that some individuals exhibit. Not every individual that demonstrates asocial behaviour has a diagnosable mental illness, but individuals that struggle with mental illnesses such as Social Anxiety Disorder (SAD) may exhibit asocial behaviour.

Benefits of Asocial Behaviour

Asocial behaviour is often perceived as a negative trait because many great leaders and successful individuals tend to be extroverted (Grant et al., 2010). However, recent research examining social solitude has found that individuals that are asocial by choice tend to be more creative because solitude allows for anxiety-free creative thinking (Bowker & Raja, 2011). Moreover, time spent alone allows individuals to develop intellectually and can lead to psychosocial well-being (Coplan & Bowker, 2016).

Regarding leadership and management, research from the Harvard Business Review suggests that introverted bosses are more receptive to their workers than their extroverted counterparts, making them effective leaders (Grant et al., 2010). Therefore, this research acknowledges the powerful benefits of solitude and does not intend to stigmatize asocial individuals. Nonetheless, there can be consequences to exhibiting asocial behaviour, especially in cases of continuous social withdrawal.

Consequences of Asocial Behaviour

There is a variety of research that suggests that loneliness and continuous asocial behaviour have several negative physical and psychosocial ramifications that can last throughout the individual's life span (Coplan & Bowker, 2014). From a physical standpoint, research has linked loneliness and social isolation to coronary heart disease and stroke (Valtorta et al., 2016). For patients already diagnosed with heart diseases such as ischaemic heart disease, arrhythmia, or heart valve disease, a poor social network nearly doubled their mortality risk, and they were three times more likely to report mental health-related symptoms such as anxiety and depression (European Society of Cardiology, 2018).

Moreover, weak social connections can impede an individual's motor skills, immune system, and cognitive function (Hawkey & Cacioppo, 2010). Cognitive functioning refers to the individual's mental abilities, such as their learning, thinking, memory, reasoning, and problem-solving (Fisher et al., 2017).

Therefore, the impediment to cognitive function brought on by the individual's weak social connections can also have negative ramifications for their learning abilities.

Furthermore, an abundance of research has investigated the link between social connectedness and longevity (Berkman &

Syme, 1979). It was found that those with stronger social and community ties lived the longest across a nine-year study, and those with weak social connections were between two to three times more likely to die within the nine years (Berkman & Syme, 1979).

Moreover, Buettner (2012) states that Blue Zones are areas in the world where individuals live longer lives, and that social connectedness is one of the explanations for the longevity of these populations. Buettner (2012) references the Okinawa community in Japan as an example, where individuals are placed into a social network at the age of five. Onwards, these groups, called moai, meet frequently and lend emotional, financial, and other kinds of support (Buettner, 2012).



One moai of women have been together for 97 years and still meet daily to drink sake and gossip (Buettner, 2012). The longevity of the Okinawa population demonstrates that social connectedness and social relationships are essential, not only to mental well-being but physical well-being as well.

Trends in Asocial Behaviour

Cortright (2015) examines various changes in society that have contributed to individuals becoming more asocial and argues that compared to the past, neighbourhoods are increasingly becoming based on economic class, making them more stratified (Cortright, 2015). Stratification and social divisions between neighbourhoods make it less likely that individuals will seek interactions with those outside their smaller community, limiting the number of social connections that are available to them.

Also, as society has become less reliant on community resources, individuals have become more disconnected from the social relationships that community resources once fostered (Cortright, 2015). This is because individuals tend to opt out of resources offered by the community, such as public gyms, schools, and transit, and often choose alternatives that offer more privacy (Cortright, 2015).

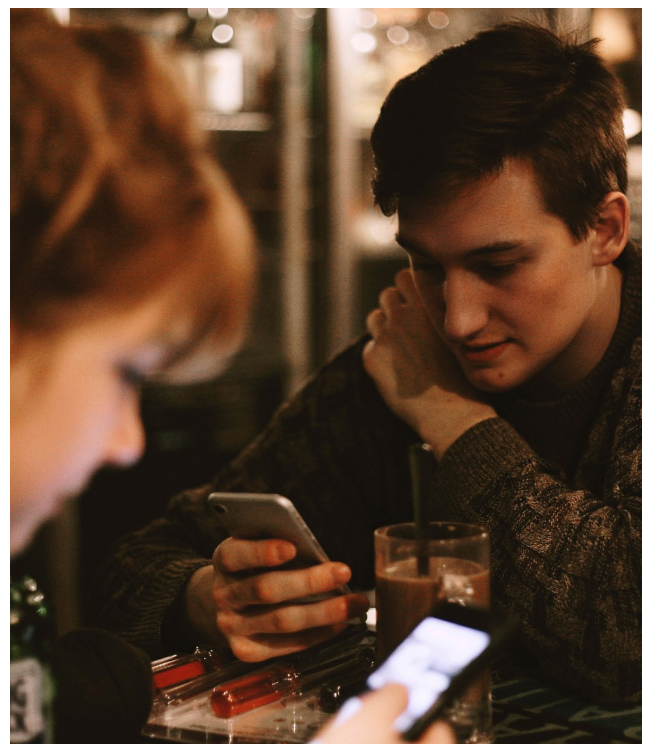
Therefore, due to the restructuring of society, specifically neighbourhood stratification and decreasing community resources, individuals have fewer opportunities for social relationships.

Regarding the role of technology, few studies have examined the extent that technology affects social interactions. Some research has focused on public perceptions of the impact of

technology on society. Findings from the Pew Research Center indicate, much like Cortright (2015), that respondents found technology, specifically social media platforms, to be harmful to and resulting in less meaningful relationships (Anderson & Jiang, 2018). Respondents argued that social media:

“...has a negative impact on social (in-person) interactions” (Anderson & Jiang, 2018, para. 17).

“it [social media] makes it harder for people to socialize in real life, because they become accustomed to not interacting with people in person” (Anderson & Jiang, 2018, para. 17).



The contradicting ways that the Internet affects sociability is often referred to as the Internet paradox because although participants rely on the Internet for communication, the Internet is also believed to harm face-to-face communication.

(Kraut et al., 1998)

In a 1995 study, researchers found that households with access to the Internet were less socially involved with their immediate family members, which lowered their psychological well-being (Kraut et al., 1998). While some research indicates that technology, specifically the Internet, is making society less social, there is research to support the opposite as well.

In 2002, Kraut and colleagues completed a follow-up study to their original 1995 study. Three years after the original study, the initial relationship they found between Internet use

and decreasing social connections and lower psychological well-being had dissipated in a majority of the households (Kraut et al., 2002). Moreover, in a longitudinal survey conducted within the same study, respondents reported positive effects on communication, social involvement, and well-being associated with Internet use (Kraut et al., 2002).

Similarly, researchers from the Pew Research Center found that some respondents believed that social media offered benefits because it fostered connectivity with others (Anderson & Jiang, 2018). These respondents argued that this was the case because:

“[social media] lets you talk to family members far away” (Anderson & Jiang, 2018, para. 12).

“[social media] enables people to connect with friends easily and be able to make new friends as well” (Anderson & Jiang, 2018, para. 12).



The social connectedness that some respondents attribute to the Internet seems to be consistent with the rich-get-richer model, which posits that the Internet offers positive outcomes for people who are already socially connected, but that these benefits do not apply to individuals who are less socially connected (Kraut et al., 2002).

Therefore, individuals who are socially “rich” use the Internet to supplement face-to-face interactions, while socially “poor” individuals attempt to use it to replace face-to-face interactions. (Nelson et al., 2016, para. 5)

This can be problematic for less socially connected individuals because the Internet cannot fully replicate face-to-face interactions, and may further harm their social skills and connectedness (Nelson et al., 2016).

Despite this, the social compensation theory asserts that the Internet can be beneficial for withdrawn individuals who are uncomfortable with face-to-face interactions because the Internet provides them with a method to create relationships and gain confidence online. (Nelson et al., 2016)

Although there is limited research on whether individuals are becoming less social, some key findings can be drawn. As society has moved away from community resources, people have

become less social face-to-face (Cortright, 2015). Moreover, society's views on technology tend to be predominantly negative regarding its effects on sociability, as many individuals attribute the loss of social connectedness to technology (Anderson & Jiang, 2018).

Upon the introduction of the Internet, individuals initially became more asocial, but over time (three years), these effects seemed to dissipate (Kraut et al., 2002). Furthermore, some individuals advocate for the positive effects of the Internet on social connectedness because it provides individuals with the opportunity to keep in touch with friends and family, while making new friends online (Anderson & Jiang, 2018). Despite these findings, to draw any definite conclusions regarding the impact of technology on social connectedness and asocial behaviour, more research is required.





Technology

Prevalence of Technology

Technology is continually evolving and becoming intricately ingrained into society. In 2018, it was found that 94% of Canadians have access to the Internet at home (Statistics Canada, 2019). As indicated by the table below, 91% of all Canadians aged 15 years or older use the Internet and 46% of these Internet users spend more than ten hours per week online (Statistics Canada, 2019).

In the United States, 96% of adults own a cellphone, and 74% own a computer (Pew Research Center, 2019). Moreover, 98% of school-aged children in the United States with a greater than \$100,000 annual household income have access to a computer at home compared to 67% of school-aged children with less than a \$25,000 annual household income (Bulman & Fairlie, 2016).

A digital divide, the gap between individuals that have access to computers and the Internet and those that do not, continues to exist in developed countries such as Canada and the United States. (Haight et al., 2014)

This reflects inequalities in society pertaining to factors such as income, education, and immigration status (Haight et al., 2014). Therefore, society’s increasing reliance on technology may exacerbate existing disparities among children from different socioeconomic backgrounds, and further intervention is required to address such inequalities. Despite this, the vast majority of Canadians have access to the Internet and other forms of technology (Haight et al., 2014).

Internet use and intensity of use	2018
	Percent
Internet use	91.3 ^A
Less than 5 hours per week	24.9 ^A
5 to less than 10 hours per week	29.2 ^A
10 to less than 20 hours per week	24.8 ^A
20 to less than 40 hours per week	13.8 ^A
40 hours or more per week	7.2 ^A

Table 1
 Statistics Canada. Table 22-10-0082-01 Internet use and intensity of use per week by gender, age group and highest certificate, diploma or degree completed. DOI: <https://doi.org/10.25318/2210008201-eng>
 A symbolizes excellent data quality

Benefits of Technology

Technology has had various benefits for society, such as aiding in the cure of illnesses, allowing research and other information to be shared quickly at one's convenience, and connecting individuals from around the world.

Moreover, Human Kinetics Canada (2020) identified that technology and social networking websites provide marginalized groups with a community. As an example, Human Kinetics Canada (2020) mentions veterans who use social networking websites to contact other veterans and converse about their relatively similar experiences. This sentiment can be applied to marginalized and stigmatized groups such as gamers who feel isolated due to their interests, or individuals with rare illnesses who seek others experiencing similar circumstances.

Therefore, the Internet allows marginalized individuals to find communities where they can share their similar experiences and struggles, and offer and receive emotional support.

Technology can also strengthen relationships by allowing friends and family to communicate while individuals are travelling or away from home (Human Kinetics Canada, 2020). Moreover, technology allows individuals to connect with others by creating, sharing, and publishing content, which is especially beneficial for researchers and artists (Human Kinetics Canada, 2020).



Consequences of Technology

Despite the critical and notable benefits of technology, there are also various consequences that should be discussed. Technology has created a new digital sphere, and some suggest that the Internet and certain websites tolerate or encourage adultery, which can lead to divorce (Human Kinetics Canada, 2020). This is evident in social media websites dedicated to providing individuals with a platform to cheat on their partners, which is an example of how technology can be damaging to relationships.

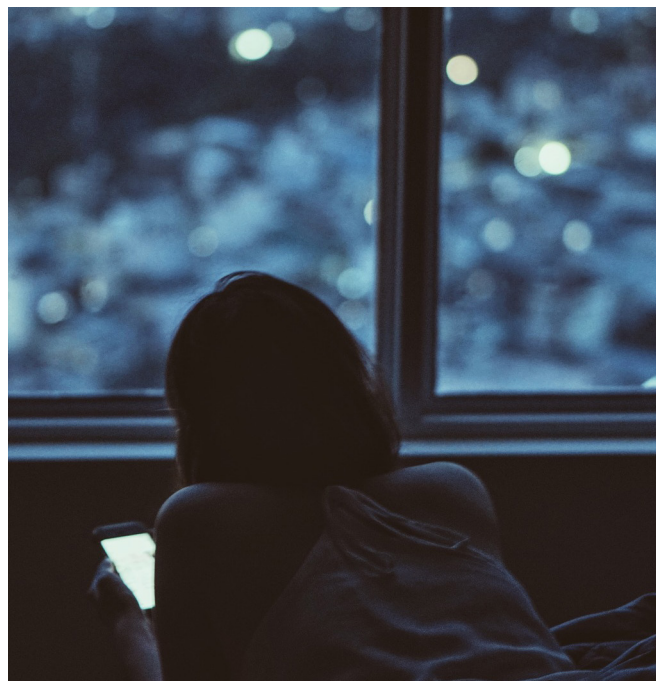
Moreover, repercussions similar in severity, such as the loss of professional connections, can be attributed to technology. Human Kinetics Canada (2020) found that there have been various instances of individuals being dismissed from their jobs or other positions due to posts on social media that are deemed inappropriate and compromise their professional reputation. Although it is unclear how common such outcomes are, they demonstrate some of the unintended consequences that accompany social media and how such instances can compromise romantic or professional relationships.

Research also demonstrates that social media has increased narcissism in some individuals because it fosters an environment for individuals to be excessively interested in their appearance and themselves (Buffardi & Campbell, 2008). This can be problematic for sociability because an excessive focus on oneself can hinder an individual's ability to create and maintain social connections.

As mentioned, research also suggests that technology may cause socially withdrawn individuals to experience further social isolation when heavily reliant on technology rather than face-to-face interactions (Kraut et al., 2002).

While social media cannot fully replicate face-to-face interactions, it can offer socially withdrawn individuals a community online. (Nelson et al., 2016)

Although the threat of social withdrawal and isolation brought on by technology has been investigated, further research must be conducted for more complete findings. Nonetheless, similar to most advancements, technology has both benefits and consequences for society, depending on how it is utilized.



Technology and Education

There are many valid concerns, as well as misconceptions surrounding technology and its effects on learning. The Great Courses (2017) explores the effects of technology on the brain.

The first concern that is addressed is that technology diminishes the attention span. What is likely to explain this common misconception is that the population's interests change over time, and individuals are more inclined to focus on their interests (The Great Courses, 2017). Due to developments in society, these interests increasingly involve social media and technology.

Moreover, technology and social media websites offer quicker gratification compared to most activities (The Great Courses, 2017). Therefore, rather than a diminishing attention span, it is more likely that individuals tend to focus their attention on what provides quicker rewards and what they find interesting (the Great Courses, 2017). This means that individuals are susceptible to focusing their attention on social media rather than

demanding tasks that require dedicating more time and effort towards (the Great Courses, 2017).

Another common misconception is that technology negatively affects individuals' memorization abilities (The Great Courses, 2017). In reality, individuals are less likely to exert effort into memorization when they are aware that they will have access to the same information later via the Internet. (The Great Courses, 2017)

The Great Courses (2017) also cites an association between frequent computer use and better cognitive outcomes among older adults, and suggests that individuals with fewer intellectual and educational advantages can benefit the most from technology.

This can include the vast array of information available to the public via the Internet, as well as assistive technologies for individuals that require accommodations for their learning.

Furthermore, according to The Great Courses (2017), technology can enhance human functions such as creativity by giving individuals access to art and information online, which allows for the development of ideas and innovation. Nonetheless, the long-term effects of technology on the attention span and memory are unknown. Since technology has made society less willing to endure boredom and more expecting of quick rewards (The Great Courses, 2017), individuals may fail to stay motivated and persevere long-term, especially in response to difficult tasks within an educational context.

As technology has become more integrated into society, it has also gained a place in all levels of schooling. In 2017, researchers at the University of Phoenix found that 63% of grade K-12 teachers use technology in the classroom daily, usually in the form of laptops (86%), but other technologies such as educational apps are on the rise.

Moreover, a growing number of elementary and secondary schools have been testing programs that provide all students with a laptop or tablet until they graduate (Bulman & Fairlie, 2016).

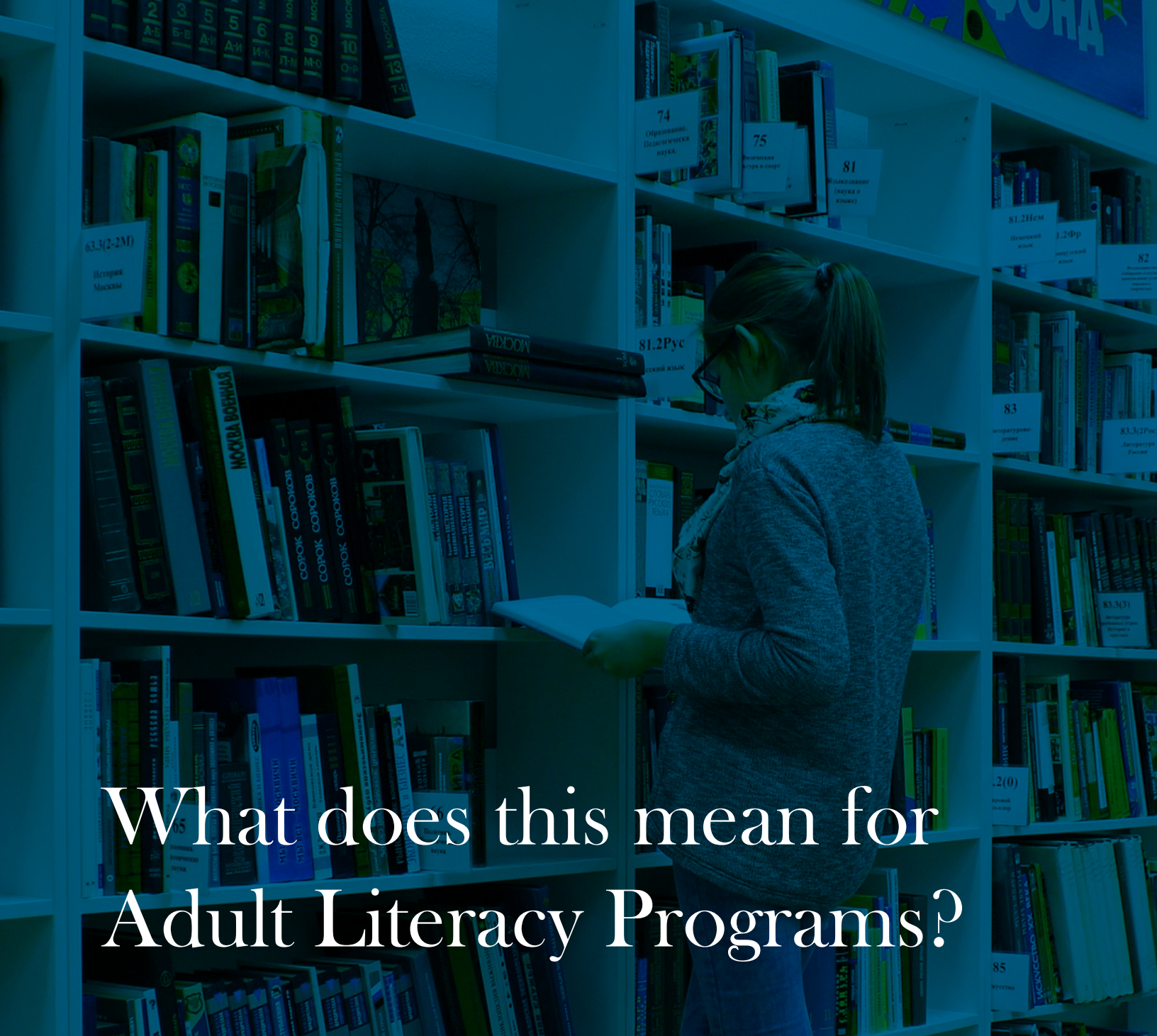
Implementing programs that provide children with constant access to technology while at school, and in some cases, at home, can minimize the digital divide in Canada and the United States.

Technology in the classroom offers various advantages such as self-paced instruction, alternative learning methods and strategies, and increased instructional time because the teacher's presence will not always be required (Barrow et al., 2009).

Despite these benefits, society remains cautious of technology in the classroom, questioning its impact on academic and social success. In a 2016 landmark study on iPad use in kindergarten classrooms, it was found that children that used shared iPads (two students sharing one iPad) significantly outperformed children using iPads individually or no iPads at all on the end of the year literacy achievement testing (Blackwell et al., 2016).

This suggests that peer-to-peer social interactions coupled with technology is the most effective method of learning for children.





What does this mean for Adult Literacy Programs?

Considering that society is changing, education must change to adapt to the developing needs of the population. For instance, the Blackwell iPad study is an excellent example of how education can be delivered in a way that caters to society's widespread reliance on technology by using iPads, while also promoting the cultivation of social skills and cooperation by requesting that students work in pairs.

This demonstrates that technology can offer significant benefits for education and that education is most beneficial for students when it encourages social interaction, but also incorporates methods that students are accustomed to, such as the use of iPads and other technologies to aid learning.

Therefore, it can be beneficial to integrate technology into classroom settings. For instance, technology can be shared among students to play games that are designed to help them grasp course content by providing learning opportunities within the game context (National Research Council of the National Academics, 2012). Researchers believe that this is a promising option because it makes academic content enjoyable and engaging (National Research Council of the National Academics, 2012).

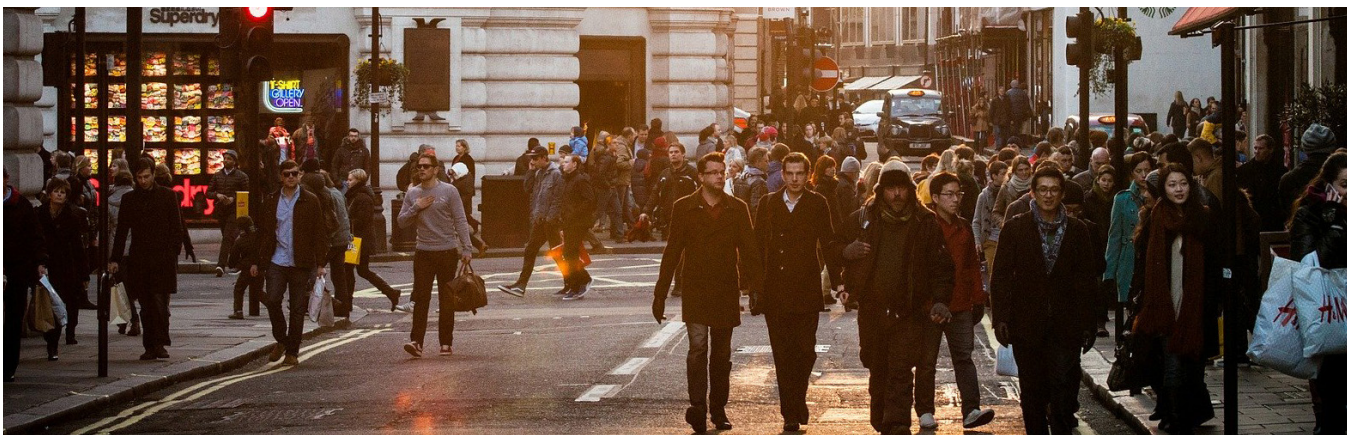
Furthermore, the Internet and learning technologies can potentially alleviate obstacles surrounding limited time and place of instruction for adult students who are balancing professional and family responsibilities.
(National Research Council of the National Academics, 2012)

Learning technologies allow students to participate in class discussions and access class content at home, amidst their busy schedules.

Some promising and affordable technologies include group collaborative communication software such as virtual meeting tools, collaboration portals, bulletin boards, discussion tools, or social media websites.
(National Research Council of the National Academics, 2012)

These technologies allow students to contribute to class discussions, access course content online, ask questions, and support each other's learning. These tools are promising because they allow students to interact with each other in engaging ways, and practice the skills and concepts they are learning by applying them. Students can also challenge their thinking by engaging with how their peers interpret course content.

Moreover, integrating collaborative technological methods into adult literacy programs can help asocial adults that are uncomfortable participating in face-to-face settings engage in classroom discussions and apply their learning, while also catering to adult students with time and location constraints.



A photograph of a person with long hair, wearing a purple shirt, sitting at a desk and writing in a spiral notebook. The desk also has a laptop, a white mug on a saucer, and other papers. The scene is dimly lit with a blue tint.

Conclusion

Although existing literature consists of a diverse set of opinions, most research acknowledges that although the population is not necessarily becoming more asocial, they are interacting in different ways, which is evident in the increasing prevalence of online communities. While some individuals are socially withdrawn to the extent that professional intervention is required, others are simply shy or prefer solitude. In either case, this research recommends integrating collaborative technologies into educational programs to offer alternative learning opportunities and accommodate students who struggle to participate in face-to-face discussions.

Technology has offered many benefits to society, but similar to all developments, it also comes with its setbacks. Rather than opposing technological advancements that

may or may not be associated with asocial behaviour, it may be more beneficial to seek methods that use technology to assist asocial individuals in their learning.

This research has serious implications for adult literacy programs and suggests that educational programs must adapt to meet the population's evolving needs. This research recommends that adult literacy programs integrate technology into their classrooms, such as interactive learning games and shared technologies to adapt to the population's increasing reliance on technology. Moreover, collaborative communication software can be beneficial for asocial individuals that are hesitant to participate face-to-face, or adult students that require flexibility due to time or location constraints brought on by their professional or family responsibilities.

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