

Evaluation of the NSW Tech Savvy Seniors program

Department of Communities and Justice

Final Report

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Executive summary

Digital inclusion is not about technology, the internet or social media, it is about connecting to other people and to the external world – it is the means to improved social and economic inclusion and, ultimately, it is about individual and community wellbeing.

The challenge for many older Australians is that they only began to be exposed to digital technologies in their later years. Unlike younger generations who are considered ‘digital natives’, technology to older people is often alien and, at a life-stage when learning new skills is becoming more challenging, seniors are at risk of being left behind and becoming more socially isolated and excluded from community life.

As a part of the NSW Ageing Strategy, the Tech Savvy Seniors (TSS) program has been working since 2012 to correct this imbalance. The program has provided thousands of seniors with the skills and confidence to embrace the digital world and reduce the digital divide.

The results are apparent in the enthusiastic response from program participants, as well as in the improvements in outcomes reported by the Australian Digital Inclusion Index (ADII). The ADII for NSW has been rising since 2015 and now stands at 0.5 points above the national average. Importantly, NSW’s Digital Ability Score, which measures digital skills, attitudes, confidence and behaviours, and to which the TSS program directly contributes, has risen from 42.2 in 2014 to 52.5 in 2020, an increase of over 24%.¹

The digital landscape has changed significantly since TSS was launched. For example, in 2017, the Australian Government launched the ‘Be Connected’ program, an Australia-wide initiative that shares many of TSS’s characteristics. This change, plus increasing budget pressure, has led the Department of Communities and Justice to launch this review.

The evaluation is required to answer six key questions:

1. Has the TSS program met its intended short & medium term outcomes?
2. Is the TSS program design appropriate for achieving the NSW Government’s goals?
3. Is there still a need for TSS digital literacy courses across NSW considering the range of digital literacy training courses now available?
4. Has TSS delivered value for money?
5. How has the COVID-19 pandemic impacted on digital training needs?
6. How can the TSS program better deliver training and outcomes for Aboriginal & Torres Strait Islander people?

The evaluation used a mixed methods approach. Sources of evidence included a document review, an assessment of monitoring data, stakeholder interviews and, with the assistance of the State Library and the Department of Education, a survey of program participants. A social return on investment analysis was used to answer question 4.

¹ Thomas, J, Barraket, J, Wilson, CK, Holcombe-James, I, Kennedy, J, Rennie, E, Ewing, S, MacDonald, T, 2020, Measuring Australia’s Digital Divide: The Australian Digital Inclusion Index 2020, RMIT and Swinburne University of Technology, Melbourne, for Telstra.

Findings and Conclusions

The conclusions are presented as responses to the Key Evaluation Questions.

KEQ 1: To what extent has TSS met its intended short & medium term outcomes?

a. Has the program met its goals for key client groups (i.e.: seniors in NSW (in general), seniors from Aboriginal and Torres Strait Island backgrounds, and seniors from CALD (culturally and linguistically diverse) groups)?

There is an immediate challenge in answering this question due to the lack of documented goals and outcomes for the program. We have based our answer on the program logic model developed from our discussions with program managers. This model articulates short and medium term outcomes for the program's general target group, which is defined 'people over sixty who have not had the opportunity to develop these skills in the workforce'. There were no goals for ATSI or CALD sub-groups.

Despite this limitation we conclude that the TSS program does contribute to most of the outcomes as described in the program logic model.

TSS fills a basic digital literacy need. Many seniors have very low skill levels. The TSS approach of face-to-face learning in small groups, with a trainer who can tailor course content to the immediate needs of the group, is a most effective learning style for this cohort. In contrast, online courses, such as 'Be Connected' modules, are suited to people who already have the basic skills to access online content, but they are too structured and difficult to access for the low skilled cohort that attend TSS courses.

Participants are highly satisfied with the training materials, the trainers, and the training experience. A large proportion said they planned to do further courses.

The face-to-face learning is not only an effective learning style, it also directly increases social connectedness. There were many stories about friendships being formed or renewed as a result of attending a TSS course.

In terms of outcomes, program providers reported increases in self-sufficiency, self-esteem and confidence in using online resources, building community, feeling supported in a group environment and reduced feelings of isolation. Participants said they increased their use of digital technologies to mediate relationships with close social networks, to support increased involvement with community life and to access information online.

One area of weakness was that participants did not significantly increase their use of digital technology to access government and business online services.

TSS meets an important need to assist seniors with managing the activities of their daily lives. It is accessible, free and delivered in many community languages. All interviewees stressed the need for very basic skills training offered by TSS. Courses are oversubscribed, have waiting lists and providers report strong demand for the most basic courses along with high satisfaction of course participants.

TSS contributes to increased social connectedness, with a strong trend of friendships being formed during the courses, family and friend connections being made online as a result of skills gained from the course and new skills enabling seniors to function more independently in their daily lives.

Although TSS provides good access to CALD communities through multilingual trainers and resources in several languages, some people still experience a barrier to participation due to dialect issues or the uneven geographical distribution of multilingual trainers.

The reach into the Aboriginal and Torres Strait Islander cohort is weak. There is no central incentive for course providers to target any specific communities, no specific resources for Aboriginal and Torres Strait Islander communities, and there does not appear to be any monitoring of Aboriginal or Torres Strait Islander participation. The fact that courses are oversubscribed by the general population is a disincentive for many providers, with some exceptions, to provide courses for the Aboriginal and Torres Strait Islander population.

KEQ 2: To what extent is the TSS program design appropriate?

We have included under the definition of 'design', the planning, funding, monitoring and overall strategic direction of the program.

An appropriate design refers to the extent that the program design meets its target stakeholder needs.

Although the original program documents were unavailable, discussions with current program management suggests that the target cohorts are 1) a general cohort of 'people over sixty who have not had the opportunity to develop these skills in the workforce', a CALD cohort and an ATSI cohort.

The needs of the target populations are largely defined by program providers according to enrolment figures and waiting lists, not from a formal needs analysis and not linked to overall government strategy, apart from the general direction of improving the digital literacy of all seniors in NSW.

The ill-defined goals and target groups make it challenging for managers to obtain an overview of program performance or to identify the need for a change in strategic direction. One example of this is our finding that the course distribution is not linked to areas of lowest digital literacy, in fact, the findings suggest the reverse is happening, possibly because wealthier LGAs are able to provide more courses.

Telstra tries to get 'real time' data on enrolments and needs so that it can provide an agile program response to participants, however the data collection process to achieve this is a burden on both providers and participants and it results in a reactive, piecemeal response rather than a strategic and considered response.

An issue with the current level of monitoring and program overview is that there are missed opportunities at a strategic level. For example, there are opportunities that could extend the reach of the program, such as partnering with other organisations (e.g. aged care home operators, CALD groups, ATSI organisations) to provide courses in settings that are more accessible to seniors from lower socioeconomic, or marginalised groups.

Program providers say that the funding process is lengthy and burdensome. The annual nature of the funding means that providers do not have certainty that the program will continue to be offered. They claim they do not know their budgets until well into the year, which hinders their ability to plan ahead or develop innovative learning approaches.

Communication within the program was an issue but is improving. Program providers and administrators said that the number of meetings with the program manager has dwindled over time, which has meant less opportunities to share innovations, learnings and news across the program. This situation has recently improved, with DCJ program managers attending group meetings of both library and community college providers.

Promotion of courses is ad-hoc and relies on course providers. It would benefit from a more strategic approach.

KEQ 3: Is there still a need for TSS digital literacy courses?

Is there still a need for TSS digital literacy courses across NSW considering the range of digital literacy training courses now available? If so, what is TSS role in the greater digital literacy landscape?

As government and commerce moves towards greater online service provision there is a growing need to ensure that the population is digitally literate, so that people can independently conduct the activities of their daily lives. This especially applies to people aged over 60, who may not be keeping up with the latest digital advances.

In recent years, many digital literacy courses have become available, mostly free and aimed at local communities. These however are dwarfed by the 'Be Connected' program, launched by the Federal Government four years ago with just under \$50m of funding over that time. Be Connected provides both online and face-to-face digital literacy courses targeted at seniors and has reached 580,000 participants over its first four years of operation. Be Connected is a comprehensive and sophisticated digital literacy program, however it is currently delivered mostly online and is targeted at people with enough digital literacy to be able to access the self-learning modules.

Within this environment, TSS holds a unique place in the digital literacy training landscape - the provision of courses to absolute beginners. This evaluation found an ongoing and significant need across the State for basic digital literacy training in the senior population. TSS delivers basic training in a supported learning environment that meets the needs of seniors with very limited digital skills. Courses continue to be over-subscribed with seniors showing a preference for face-to-face and flexible learning offered by TSS.

Importantly, within this context, TSS has an opportunity to target its delivery to ensure that the most marginalised seniors in NSW are supported to improve their digital literacy.

KEQ 4: To what extent has TSS delivered value for money?

Two estimates of value were determined – the first compared the unit cost of delivery for libraries versus community colleges². The second estimated overall program value using a Social Return on Investment approach.

Unit cost comparison

A comparison of funding per enrolment of libraries versus community colleges showed that from 2017 to 2020 libraries recorded a unit cost of \$28 per enrolment while

² TSS is delivered through two streams, one through municipal libraries, the other through community training colleges.

community colleges increased from \$33 per enrolment in 2017 to \$79 per enrolment in 2020. Overall, libraries appear to be more efficient deliverers of TSS courses.

Social Return on Investment

The SROI analysis was based on data from 2017-2020 and included estimated benefits that are expected to accrue for three years beyond the program period.

Over the period 2017 – 2020 the program is estimated to have generated \$8.5 million in benefits for an investment of \$2.5 million. Including the total benefit that is expected to accrue for the three years beyond the program period, the TSS program is expected to generate a social return of \$6.64 for each \$1 invested.

This compares favourably with a 2014 evaluation of TSS that recorded a social value of \$6.78 for each dollar invested and the 2020 evaluation of the Be Connected program that reported a social return of \$4.01 for each dollar invested³.

KEQ 5: To what extent has the COVID-19 pandemic impacted on digital divide training needs?

The COVID-19 pandemic created situations of isolation for many seniors. Participants reported that the pandemic made them more reliant on digital technology not only for social connection but also to keep up with the latest COVID-related information. The greatest impact of the pandemic, in relation to digital training needs, was its reinforcement of the importance of social connection through digital technology and therefore the value of digital literacy training. This was seen in increased demand for courses teaching video conferencing, such as Zoom, which empowered people to attend other classes or to maintain connections with family and friends. The program's agility in development of courses in response to emerging needs such as how to use QR codes and the NSW services App empowered people to go out in the community.

The requirement for social isolation led to some innovations in course delivery to allow people with more than basic skills to continue their learning via online courses, however, seniors who were complete beginners were often excluded due to their lack of online skills. Despite some success with online learning, the majority of TSS participants still prefer to receive their training in person.

KEQ 6: How can the TSS program deliver better outcomes for ATSI people?

KEQ 6 is answered in the next section on recommendations.

³ McCosker, A., Tucker, J., Critchley, C., Hiruy, K., Walshe, J., Suchowerska, R., Barraket, J. (2020) Improving the digital inclusion of older Australians: The social impact of Be Connected. Swinburne University of Technology, Melbourne.

Recommendations

Based on the findings and conclusions, the following recommendations are provided:

5.1 Establish clearly defined program strategic documentation which defines TSS's place in the wider digital literacy training context as a provider of basic digital training to absolute beginners.

This should include:

- An agreed program logic model that identifies what success for the program looks like and links the program outcomes to the NSW government's ageing strategy.
- Clear target populations.
- A formal needs analysis of each target population to ensure the program is delivering appropriate training to the people most likely to benefit.

5.2 Develop a simple, centralised business plan with performance monitoring and reporting.

This should include:

- An annual business plan with targets and performance indicators for each activity and outcome described in the logic model.
- A simple and focussed monitoring system to collect only the most relevant information relating to program activities.
- A simple mechanism for regular (say quarterly) management performance reporting.
- Regular (say biannual) meetings between program managers and providers to exchange information, encourage sharing of innovative delivery approaches and ensure feedback is provided for adaptation of program delivery.
- A separate and less regular (say annual) process for outcomes reporting.

5.3 Review delivery design to improve value.

This should include:

- A detailed review of the efficiency of community colleges and municipal libraries to understand the drivers of libraries' efficiency and the causes of the inefficiency of community colleges.
- Establish efficiency performance measures for providers. Consider participant unit cost as a key measure and collect the performance data for each provider on a quarterly or course basis.
- Realign funding so that greater funds are directed to more efficient delivery partners. This could mean moving funds away from all inefficient providers (that is, both colleges and libraries), or directing funds away from colleges as a

group and reinvesting in the more efficient library system, or finding new, delivery partners in target groups such as CALD and ATSI communities.

5.3 Expand program reach by building partnerships with community organisations with established links to target populations. (Incorporates KEQ 6 - how to deliver better to ATSI population)

This should include:

- Identification of key target groups such as ATSI, CALD, low SES groups, building an understanding of their needs and geographical distribution.
- Centralised establishment of partnerships with relevant community organisations to explore delivery of TSS through trusted community sources.
- Exploration of other delivery sites such as aged care providers to improve access.
- Establishment of targeted grants directed at priority population groups.
- Development of resources targeted at priority populations such as ATSI.
- Adaptation of course structure or delivery to encompass broader participant needs.

5.4 Streamline program delivery.

This should include:

- Simplify the funding process to minimise the burden on providers.
- Provide centrally developed promotional materials aimed at the program's target populations.
- Encourage flexibility of course delivery, for example fund ongoing tech cafes where seniors can attend for specific support.

1. Introduction

NSW Ageing Strategy

Declining birth rates and increased life expectancy have resulted in a significant increase in the number of older people in Australia. Between 2000 and 2030, the ABS projects that Australia's population will increase by about one-third. In the same period, the number of people aged 65 years and over is projected to increase by 139% and will comprise more than one in five of the total population or 5.7 million people.⁴

NSW has responded to the issue with the Ageing Well in NSW: Seniors Strategy 2021–2031. This work builds on the previous 2016–2020 Ageing Strategy and is complemented by biennial action plans that consolidate activity across a number of government agencies.

The Department of Communities and Justice (DJC) leads the implementation of the Seniors Strategy and delivers projects across many activity streams such as:

- Arts events, grandparents day, the seniors card and the premier's gala concert.
- A modified sports program that offers low impact sports to older people.
- Cooking for one or two program to help older people remain self-sufficient.
- The Tech Savvy Seniors (TSS) program, which supports older people to improve their digital literacy through low cost or free training and online resources for using new technology. It is delivered in partnership with Telstra.

The Tech Savvy Seniors Program

The TSS program was launched in 2012. It was evaluated in 2014 and the CALD component was evaluated in 2018. With increasing budgetary pressures, particularly with the impact of the COVID pandemic on the State's finances, plus the impact of competing programs such as the Federal Government's 'Be Connected' program, it is appropriate and timely to carry out a full evaluation of the program.

Purpose of this evaluation

Since TSS inception in 2012, the program has undergone several reviews, including a full evaluation in 2014, an evaluation in 2017 that focused on delivery to the CALD community, and annual reports based on participant feedback through the Telstra-sponsored Culture Counts survey.

However the digital landscape has changed since the inception of TSS. In 2017, the Commonwealth Government launched the 'Be Connected' program, an Australia-wide initiative aimed at increasing the confidence, skills and online safety of Australians, with a

⁴<https://www1.health.gov.au/internet/publications/publishing.nsf/Content/work-res-ruraid-toc~work-res-ruraid-2~work-res-ruraid-2-5~work-res-ruraid-2-5-2>

particular focus on older Australians. The 'Be Connected' program shares many characteristics with the TSS program.

Due to increasing budgetary pressures and the changing digital landscape, a full program evaluation is needed to guide the programs strategy and growth into the future.

The purpose of the evaluation is to understand whether the desired social outcomes within ageing communities are being achieved from participation in the program.

Audience and stakeholders

The review report will be used within the Department of Communities and Justice (DCJ) as an input to the improvement and future direction of programs to promote digital literacy and connectedness within the seniors community.

2. Scope and method

Evaluation objectives

The objectives of this evaluation are to assess:

- The effectiveness of the program. That is, to what extent it has met its objectives.
- The appropriateness of the program design. That is, to what extent the Tech Savvy Seniors training model meets the current and emerging needs of seniors in NSW.
- The efficiency of the program. That is, to what extent the program has delivered value for money.
- Lessons learnt and adaptive management to date. In particular, how the disruptive COVID-19 pandemic has impacted the digital landscape.

Scope

The scope of the evaluation includes:

- The period from financial years 2017/18 to 2019/20.
- Short and medium term outcomes.
- The program model, including governance, funding, design and training.
- Key participant cohorts including Aboriginal and Torres Strait Island participants.
- Impact of the current digital context, including the Australian Government's program 'Be Connected', and the impact of COVID-19.
- Value for money.

Key Evaluation Questions (KEQs)

Key Evaluation Questions (KEQs) are the high-level questions an evaluation is designed to answer. The KEQs for this evaluation are:

- KEQ 1: To what extent has TSS met its intended short & medium term outcomes?
- a. Has the program met its goals for key client groups (i.e. seniors in NSW (in general), seniors from Aboriginal and Torres Strait Island backgrounds, and seniors from culturally and linguistically diverse (CALD) groups?
- KEQ 2: To what extent is the TSS program design appropriate for achieving the NSW Government's goals?
- KEQ 3: Is there still a need for TSS digital literacy courses across NSW considering the range of digital literacy training courses now available?
- a. If so, what is TSS role in the greater digital literacy landscape?
- KEQ 4: To what extent has TSS delivered value for money?

KEQ 5: To what extent has the COVID-19 pandemic impacted on digital divide training needs?

KEQ 6: How can the TSS program better deliver training and outcomes for Aboriginal & Torres Strait Islander people?

Methodology

The evaluation used a mixed methods approach. Sources of evidence included:

- A review of documents about the design of the program, changes to the program, management and monitoring documents, and delivery documents.
- An assessment of quantitative data, including the database associated with the Culture Counts surveys and dashboard.
- Stakeholder interviews. A number of key informants were interviewed. In addition, some stakeholders such as the State Library, Department of Education and the Ethnic Communities Council of NSW organised for questionnaires to be distributed to a small group of participants and providers. These questionnaires effectively make up a small sample survey, which has contributed to the quality of the evidence.

Limitations

The evaluation was limited by:

- Access to the original program plan. The original documents that defined the program, including an original program logic, are no longer accessible. The evaluation relied on the understanding of current DCJ staff about the original objectives of the program and design of the program logic.
- The evaluation data was not of high quality. Participant feedback was potentially skewed in the direction of positive experiences because participants could either complete surveys with help from their tutors, therefore encouraging a positive response, or could receive the surveys online, therefore excluding people who did not have the skills to complete an online survey.
- Engaging stakeholders for this evaluation was challenging because:
 - a) It was not possible to obtain a broad range of participant contact details. This limited the ability to randomly select interviewees or to conduct a full and independent survey.
 - b) Although some participants were prepared to be interviewed, many of those who provided contact details did not respond to requests for an interview time.

3. Findings

Overall findings

All interviewees expressed very strong support for the TSS program

All interviewed providers and participants expressed a high level of enthusiasm for the program. They described it as meeting a significant need in the community for improvement of digital literacy with the major outcomes described as social and digital connectedness.

"Outcomes are absolutely amazing." Provider

*"That cohort of seniors are looking for connectedness, especially if living alone."
Provider*

Resources are highly valued

The majority of respondents said that the resources provided are clear and easy to understand and used regularly in class. Several people noted that participants gave positive feedback regarding the YouTube videos. Participants value taking home a hard copy resource for later reading.

The Training Guides are seen as useful and are also provided to students as a course summary. Several trainers reported that the resources made the courses easy to teach.

"An excellent format and structure which works to empower both learners and presenters to increase their confidence. This is achieved through both skill acquisition and building of theoretical knowledge." Community College

"Our participants really like the notes especially the handouts as they like to have something to take away and refer to." Library

TSS is accessible to disadvantaged groups

TSS is accessible to disadvantaged groups through:

- Making it free for people over 60 who may be financially disadvantaged.
- Providing courses in languages other than English.
- Delivering courses in friendly and safe environments that encourage questioning and engagement in learning.
- Course content that is targeted to complete beginners, whose lack of knowledge might discourage them from attending more formal courses.

"It has great trainers associated with the program through the Ethnic Communities Council. I have dealt with many trainers over the years, both in teaching English and Community Language and they have all been so professional and related to their class really well." Library

"It is fantastic that it is offered in such a range of languages, we run them in 5 languages at my current library, and people are so appreciative to be able to learn in their mother tongue." Library

TSS is a credible brand

TSS is perceived as a well-established and recognised program and brand, delivered through experienced trainers and a safe place to learn and ask questions.

"The TSS program is the only program in the community that provides such breadth in its service offering. The only comparable service would be a Genius Bar at an Apple Store (8 stores in Greater Sydney) but that is only beneficial to iPhone/iPad/Mac users. Apple is now pushing their Genius services online so the face to face service is being phased out." Community College

TSS fills a strong digital literacy need

All respondents highlighted the strong need for very basic skills training. All providers noted that classes are regularly booked out, with long waiting lists.

"During the last 5 years we have had 100's of seniors attend workshops, many of them absolute beginners in using digital technology. The learners who attend appreciate the traditional face to face nature of the training but it also provides us with a mechanism to enable them to access other learning opportunities online." Library

TSS also fills a strong social connectedness need

Providers and participants reported that the course enabled participants to improve their connectedness to their family and friends, which they highly valued. There were many reports of friendships being made through TSS and lasting beyond the courses.

"Although at the peak of the COVID-19 breakout our TSS classes had to be cancelled, once restrictions started to ease, we were able to offer the community a range of TSS programs with limited numbers (4 per class). Once we advertised, we were completely inundated and overwhelmed by the number of seniors wanting to get out of their homes and join our TSS programs so that they could effectively communicate with family members and friends whom they hadn't seen for quite a time. We had planned for 14 courses (4 students per class) but due to the demand, we ended up holding 34 courses in the space of 3 months!!" Community College

The Over-60s target group

Demand for TSS courses continues to be strong

Demand has been strong however 2019-20 was impacted by the COVID-19 pandemic.

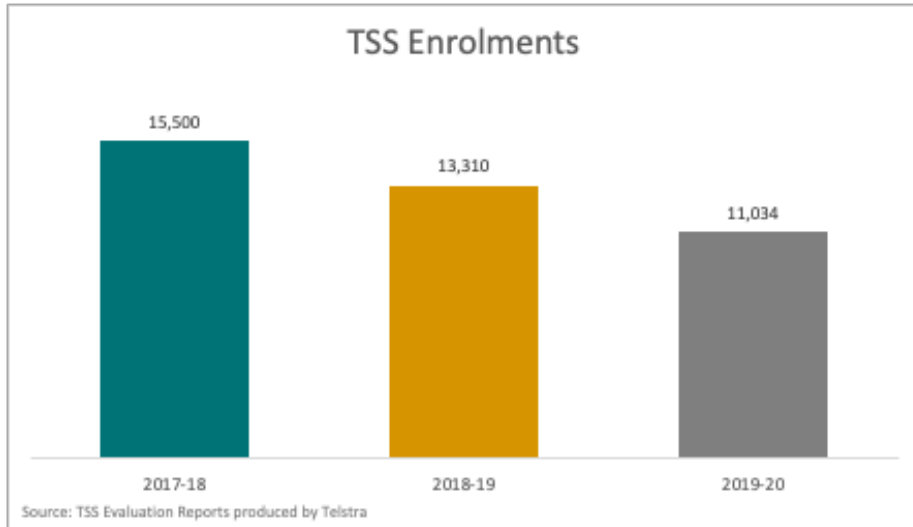


Figure 1 – Number of enrolments in TSS courses

Providers stated that their courses are generally oversubscribed, with long waiting lists.

"We have waitlists to do the program, people begging to be let in if someone drops out." Provider

Females make up the larger proportion of TSS participants

Females make up the majority of TSS course participants, even though the ratio of females to males in the over 60 population is 53% females and 47% males.

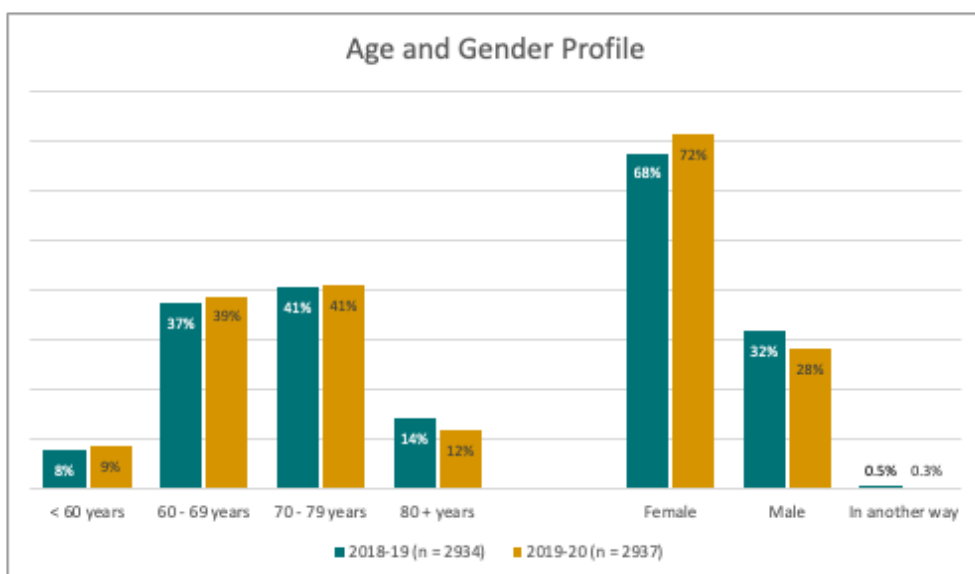


Figure 2 – Age and Gender profile

The demand continues to be for basic courses

The course topics delivered have remained fairly constant and basic.

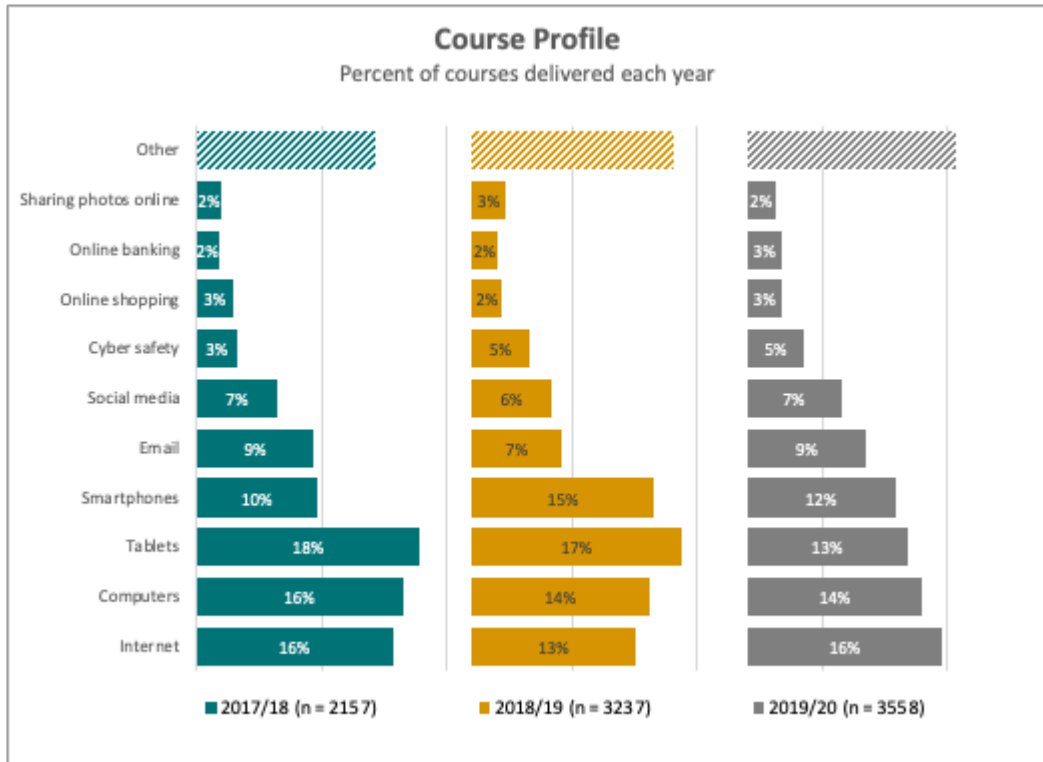


Figure 3 – Course profile

All respondents highlighted the strong need for very basic skills in the community.

“Time can be taken up in these short courses with assisting students with basic skills such as how to use a mouse, where keys are on the keyboard etc.” Library

“Combatting fear of, and ignorance of, technology. Lots of people describe themselves as stupid or as being frightened of breaking their phone or iPad (or whatever device they are using) by making mistakes.” Community College

Participants are highly satisfied with the training they received.

Figure 4 shows that participants have been consistently satisfied with the training resources, the trainers and the training delivery.

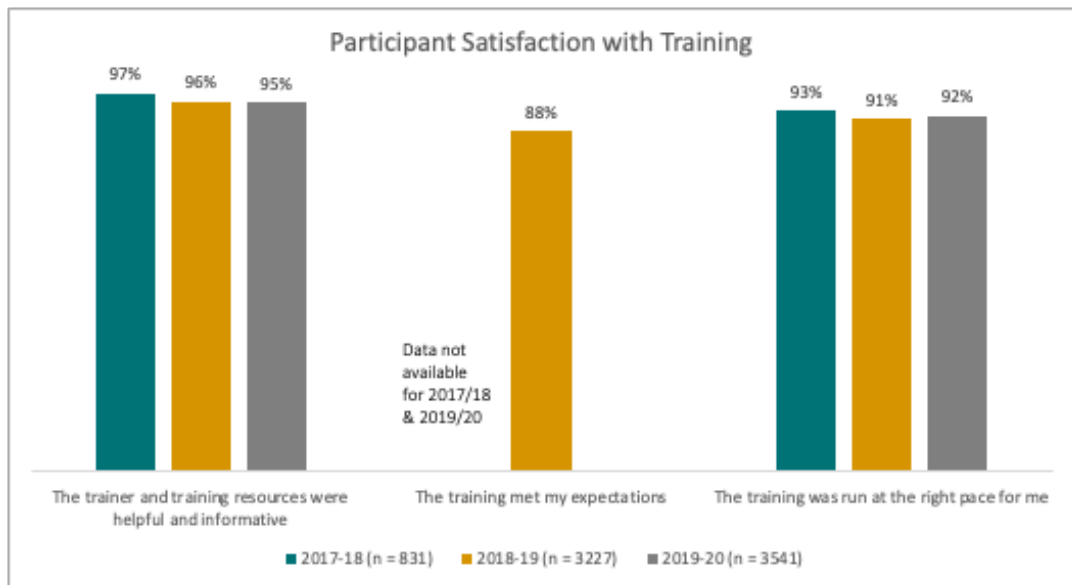


Figure 4 – Participant satisfaction with Training

And figure 5 shows that almost all participants surveyed intend to do further courses.

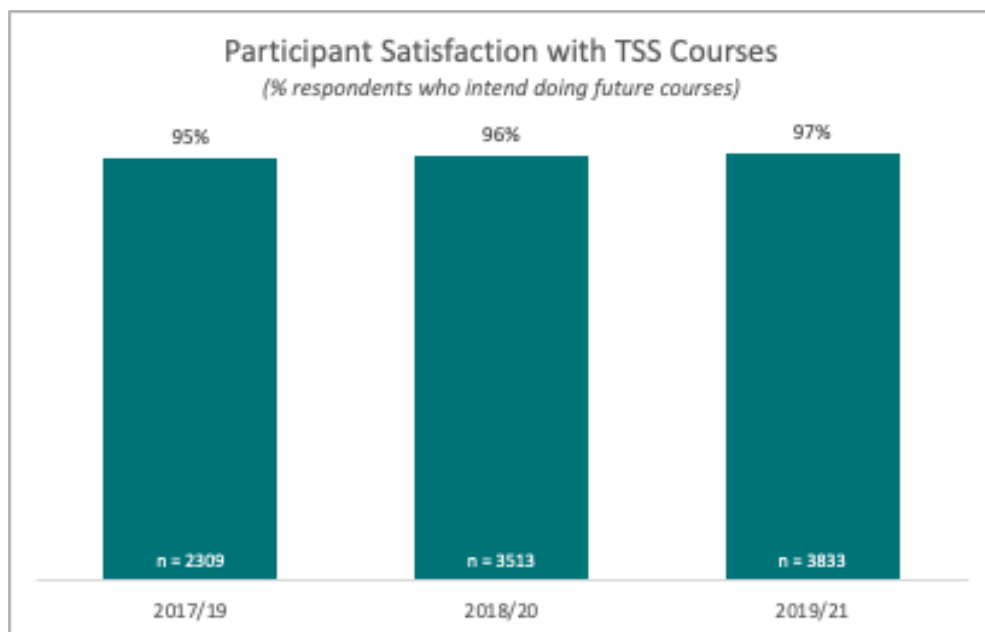


Figure 5 – Future intentions

Attending face-to-face classes directly increases social participation

People often repeat classes or attend broader drop-in style classes to meet with friends they have made on the TSS course. Some people have continued to meet with friends they met on the course.

"We go to TSS whenever we hear there's one on." Participant

"Would see people there that we knew." Participant

"Informative, social, interesting." Participant

"I'm by myself, nobody to ask...got to be able to keep in touch with family...don't ever let them stop doing it!" Participant

The broad range of abilities and devices makes it hard to pitch the classes

Trainers described trying to deliver to a range of learners (from absolute beginners who have never or rarely used a computer to those learners with more experience) as a challenge. This is exacerbated by the different devices and operating systems that people bring to classes. All interviewees described attendees as bringing in their new iPad, smart phone or technological issue to be addressed, with the course content an added benefit. This results in classes being adapted to the needs of the class, often addressing the lowest skill level.

"The levels of the participants can be tricky as it's hard to skip ahead or slow down too much if a particular participant is struggling." Librarian

"We try to accommodate for this by always having one person who delivers the class, and another who assists the learners as required." – a range of providers used a similar approach

"Learners who bring their own device to class their devices can sometimes be very slow as may be a hand me down device from a family member or friend." Community College

The broad range of abilities and devices has also led to innovations

The varying needs, along with the flexibility of the program, have resulted in many libraries and colleges developing innovative ways of using the course materials. Examples include delivering services for marginalised groups that include non-seniors, incorporation of aged care students into classes to support participants, use of the Be Connected materials during TSS sessions, using library staff to deliver sessions instead of tutors, and many variations on the model of 'tech cafes', regular, ongoing problem-solving sessions where people can take their specific issues for one-on-one advice.

The pandemic led to a significant challenge

COVID was raised as a significant challenge as the face-to-face model had to be adapted. Seniors who were complete beginners were often excluded from participation, because they could not use online technology. However, some respondents described creative solutions, where they talked more advanced participants through the process of setting up a Zoom account, which led to continuing education for those students.

Others described the challenges of re-opening after restrictions were lifted, including the increased need for sanitising and social distancing, which limited the numbers.

"Covid-19 had definitely led us to be flexible, adaptable and more creative when delivering our library programs." Library

COVID reinforced the importance of this program for social connectedness

The COVID-19 pandemic created situations of potential isolation for many people across NSW. This increased the need for learning new digital skills, with Zoom, QR codes and using the services NSW app identified as the highest needs. There were several reports of seniors not going out because they did not know how to use QR codes, and the impact of learning how to use them and the services NSW app was significant in reducing social isolation.

The NSW government responded to the pandemic by allocating funding to Community Colleges for devices to enable classes to continue online. The Ethnic Community Council had forecast issues with face to face learning, so taught course participants how to use Zoom and continued their TSS courses online. Despite some successes with online learning, seniors still want their classes face to face, with some libraries reporting regular calls asking when classes would resume.

The banking module presents a potential risk to government

Several interviewees reported that the course design includes participants conducting actual bank transaction during class. This means that participants divulge their bank details to tutors, creating a significant risk for the program.

The CALD target cohort

CALD communities have complex needs

Providers working with Culturally and Linguistically Diverse (CALD) community members reported that people in their communities can feel more isolated because of the language barrier. Although TSS has developed resources in a number of community languages, courses may still exclude people who speak a dialect or are not literate in their spoken language. This makes the trainer's skills critical to the success of the course.

Interviewees and email respondents gave highly positive feedback about the quality of trainers provided by the Ethnic Communities Council (ECC). Most libraries use ECC trainers, but availability appears to be limited to the metropolitan area, making it difficult for rural areas with large migrant or refugee populations to access trainers.

Providers reported that in their experience, people from CALD backgrounds prefer to attend training within their own community, for example their social club or church rather than using libraries. This offers opportunities for partnering with a range of multicultural groups to ensure the course is being offered from a trusted source of information.

Case studies

Wagga Wagga

Wagga Wagga has a high refugee population, and the region has a diverse population covering one hundred and seven languages. Through a partnership with the Red Cross and the Multicultural Council, the library recruited bi-lingual people who have a knowledge of information technology to deliver the TSS program across a broader range of languages than could be possible through the course materials. An added benefit was that the trainer position was the first employment in Australia for many of the trainers.

Wollongong

The Wollongong region also has a large number of new arrivals and refugees across diverse languages, many of which are not covered by the course materials, for example, Burmese.

The library is trialling an approach using community mobilisers alongside English speaking trainers, delivering to one language group at a time. This helps people improve their English skills at the same time as their digital skills, a need expressed by the local CALD community.

CALD Participant feedback

The lack of a central database made it difficult to reach large numbers of participants, therefore a short survey was created and distributed to some participants. The feedback below gives a strong indication of the program's popularity and impact.

Pre-course skill levels of attendees ranged from absolute beginner to very basic

Most (75%) participants rated themselves as absolute beginners, with the remaining 25% rating themselves as at a 'basic' level. Some were surprised by how much they did not know before attending the course.

"I was thinking that I know a lot, but I was wrong." Participant

"My kids helped me to turn on the computer if I want to search anything and they need to sit with me until the end." Participant

"I didn't know how to use the keyboard keys at all." Participant

"Very basic I know how to turn on/off my computer, but not much more, I feel that I would damage the computer if I change any of the setting or open any apps." Participant

CALD participant satisfaction was high

CALD participants, like English speaking participants, were strongly satisfied with the course and believed it met their needs to a large extent. Figure 6 shows that all respondents intend to attend another TSS course and would recommend it to their friends, with many stating they already have been telling their friends.

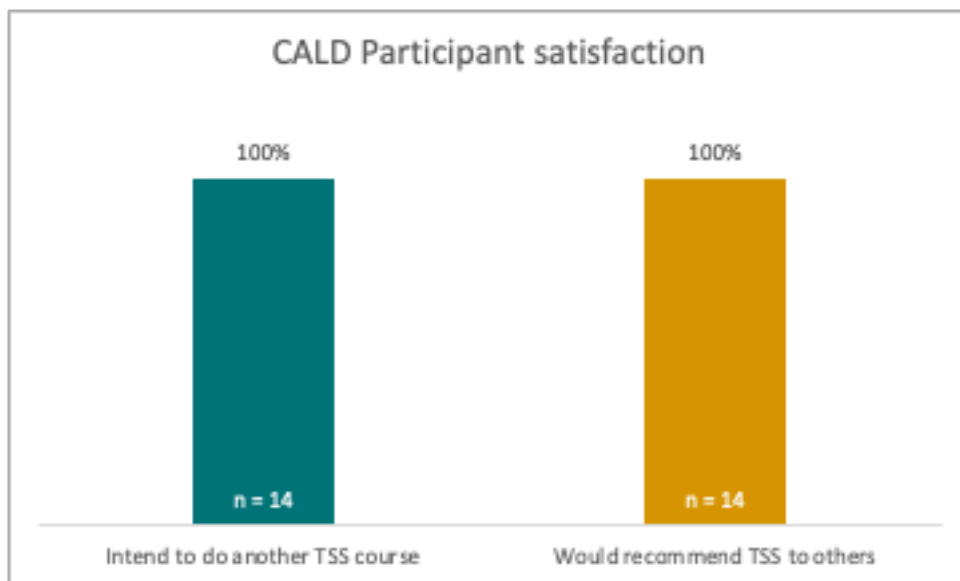


Figure 6 – CALD Participant Satisfaction

Comments included:

"I believe the courses help elderly keep up with the new technology and improve the life quality." Participant

"Beyond my expectation. This was exactly what I needed. I enjoyed every class." Participant

"It exceeded my expectations. I am just so thankful that I got to know such program and was able to join the class. This sort of program is something that I have been longing for long. I wish I knew the program before." Participant

"The courses are an eye opener to the digital world." Participant

"It is one of the best programs, very useful." Participant

"They are using easy ways for us to understand the digital technology." Participant

"Always ECC using excellent resources, time and locations to run the TSS program." Participant

"I always wish to have these sessions on regular bases." Participant

"I am looking forward to it every time." Participant

Participants highlighted the patience of trainers, feeling safe to ask questions, making friends and gaining independence as aspects they valued in the courses.

"Someone teaching me how to use the computer and being able to look up information by myself as well as connect with family and friends." Participant

"I asked my kids they wouldn't have time for me, so we appreciate to opportunity of learning through tech savvy program, feel connected now." Participant

"The fact that I could learn something that I always wanted to learn and most of all in Korean which was amazing. I just want to keep learning." Participant

"I made friends that I met in the class. We became good friends and that is one of the things that I am grateful for as well. We are minority and seniors. It is not easy to meet people in the similar situation as me." Participant

Outcomes were significant for this group

The program achieved a strong result, with all fourteen surveyed CALD participants indicating an increase in confidence following their course, 93% saying it significantly increased their knowledge and approximately 80% improving life skills such as use of government services, involvement in the community and accessing online information (Figure 7).

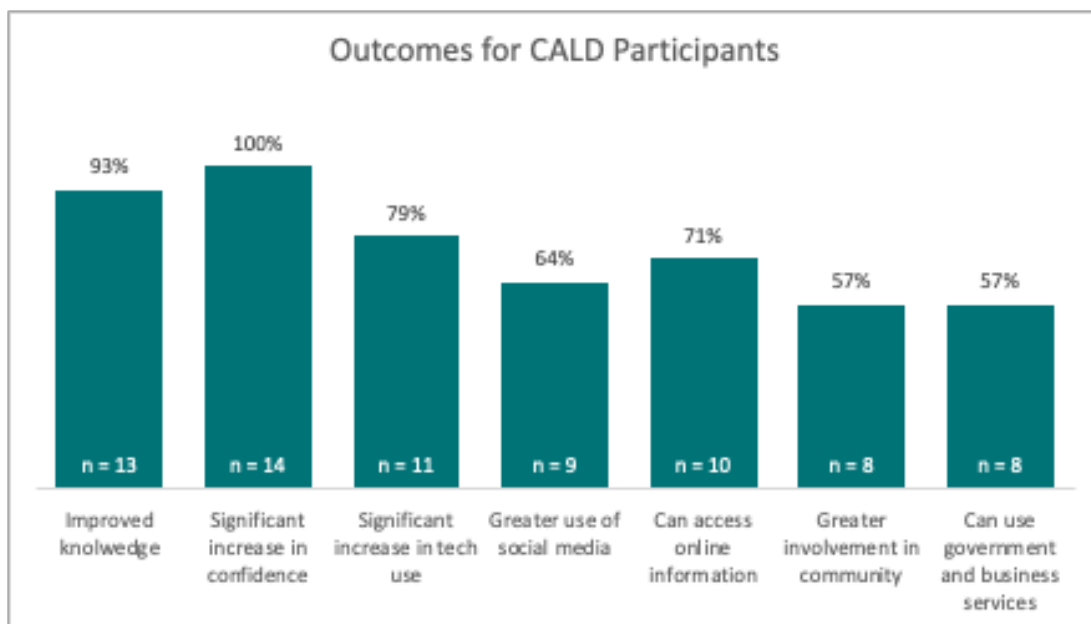


Figure 7 – Outcomes for CALD Participants

Comments included:

"Even our children were surprised of how much we know now. We feel more confident, especially with everything we do now, we need to have digital skills." Participant

"Before the course, I wasn't interested in learning computer technology because I wasn't aware computer can do so many different things. Now I think computer technology is amazing, so my learning enthusiasm has greatly increased. I think there are still a lot of things for me to learn." Participant

"The trainer encouraged us to try things which I was afraid of before attending the classes." Participant

"They gave me a lot of confidence to keep learning." Participant

"After learning new skills, I use more of social media to get information. I also search internet more for local or community event information. Now I also use the knowledge of ZOOM meeting to attend many online events if I can't physically attend." Participant

"I have an email address now and confident to use it, while before I have no ideas what is email address is." Participant

"Now I use iPad to search the internet for the information I need, or search and learn some new skills. I also regularly watch world news, entertaining programs or just checking weather forecast. I rely on translation tools to know what is happening in my local council. Most importantly, I can keep in touch with my family and friends via internet. Because of this, during COVID 19 lock down period, I didn't feel very lonely or isolated when I have to stay at home. I feel that iPad and internet is a very important part of my life now." Participant

Impact of COVID-19

Participants reported that COVID-19 made them much more reliant on digital technology to connect with family and friends and to keep up to date with COVID related information. This has made TSS even more critical to support the independence of seniors.

"English class that I attended before COVID was done face to face. We completed homework on paper. Now it is also moved online, so I have to complete work on computer and email it back. I have attended many different kinds of workshop via ZOOM in the past nine month, like gardening, cooking or other information sessions. COVID made us realise how important to have digital skills." Participant

"I was attending the TSS program before the COVID 19 learning digital technology Face to face method, but during the COVID 19 the TSS program was running by the ECC using online method /Zoom apps, as much as the trainer from ECC tried to help me to participate in the online sessions, I couldn't." Participant

"It was very hard on me during the COVID 19 pandemic, I needed to support my family using digital technology." Participant

The ATSI target group

ATSI Feedback

Some providers indicated that they are ready to deliver courses to indigenous groups but have not yet been approached. This review was able to make contact with one provider who has taken the initiative and approached indigenous groups, shown a flexible approach and achieved good results.

Case study

A library ATSI and CALD liaison officer worked over a period to develop links with the local indigenous community. She approached the local Aboriginal Council Centre asking whether they had a need for classes in digital technology and what the library could do to help. The Aboriginal Land Council offered a meeting space. There was an existing day-care group of elderly women attending that location who expressed interest in the course. Staff brought all equipment with them to the centre. Courses were delivered in the familiar space, with a culturally appropriate trainer attending every session. This trainer had worked with the group before and attending library staff had completed a cultural competency course.

Library staff modified the TSS resources to include more lifestyle skills such as phones, tablets, Facebook, scanning, storing data, and internet safety. They made a workbook with the extra information for the trainer and ran the class in a less structured way than for other TSS courses.

Outcomes

The library staff developed what they described as a *'fantastic'* connection with the indigenous community. Trust has built up and participants are more relaxed about the course. The library has since been invited to an indigenous art exhibition and to participate in the Art Trail. The library plans to deliver further indigenous community engagement including an oral history project and fire safety training.

"Now the group trust us and feel confident with anything that happens."
Provider

Lessons

Lessons in delivering training to ATSI communities include:

- Better to meet face-to-face to build a relationship, and then summarise meetings in a follow-up email.
- Delivery at a familiar site builds trust in the course.
- Less structured classes work well for indigenous groups.
- Courses should be tailored for participant needs: Each week the library staff asked, "what else can we do?"

Program Outcomes

The program logic⁵ suggests that TSS training should lead to short-term outcomes of:

- Increased confidence to use digital technology.
- Increased knowledge of how to use digital technology.

These short term outcomes are then expected to lead to medium-term outcomes of:

- Increased accessing of information online (such as news, personal interest, travel, health, local business).
- Increased use of technology to communicate with family or friends.
- Increased use of the internet to access services that I need (such as banking, shopping or government services).
- Increased use of the internet to look for information about events or activities in my community.

The increased use of technology is then expected to contribute to longer terms outcomes of improved wellbeing, greater social participation, and increased active ageing.

Confidence and knowledge remained high after six weeks

Participants' confidence and knowledge was assessed using the questions:

- I feel confident using tablets, computers or smart phones.
- I am able to explain how to use a tablet, computer or smart phone to a friend or family.

Figure 8 shows that confidence and knowledge was high at around 70% and that it remained high after six weeks. The increase from 60 to 68% in participants who said they feel confident to explain how to use technology is a statistically significant increase.

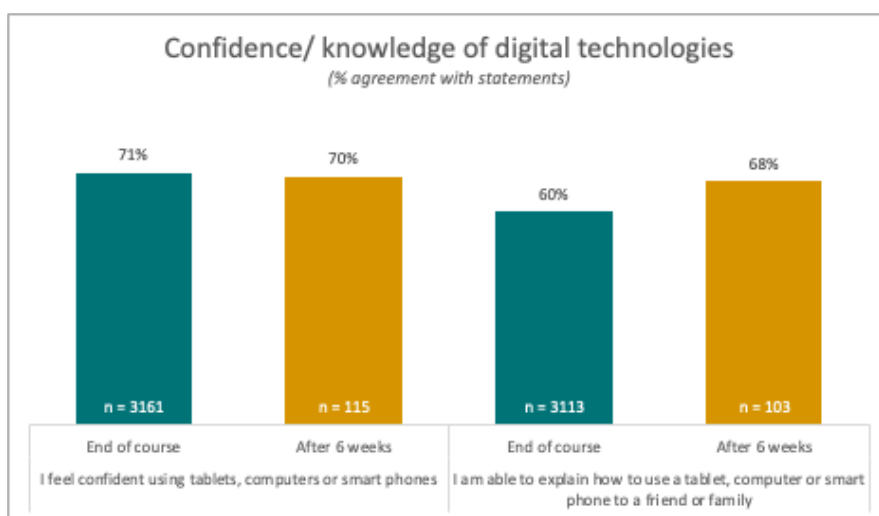


Figure 8 – Outcomes about confidence with digital technologies

5 Suchowerska, R. O Zinn, J. 2014. Evaluation of TSS Program (NSW), University of Melbourne

Use of technology (medium term outcomes)

At the end of each course participants were asked about their intention to use technology, using the four questions below. Respondents who participated in the 6-week follow-up survey were asked about their actual use of technology using the same four questions:

- I access information online (such as news, travel, health, local business)
- I use email, Skype or social media to communicate with family or friends
- I use the internet to access services that I need (such as banking, shopping or government services)
- I use the internet to look for information about events or activities in my community

Figure 9 shows an increase for the three questions about finding information or using social media. The question about using the internet for shopping or banking is not only lower than the others immediately after training but it reduced after six weeks. This suggests that for uses that involve greater consequences, such as financial transactions, more training may be required to raise knowledge and confidence levels.

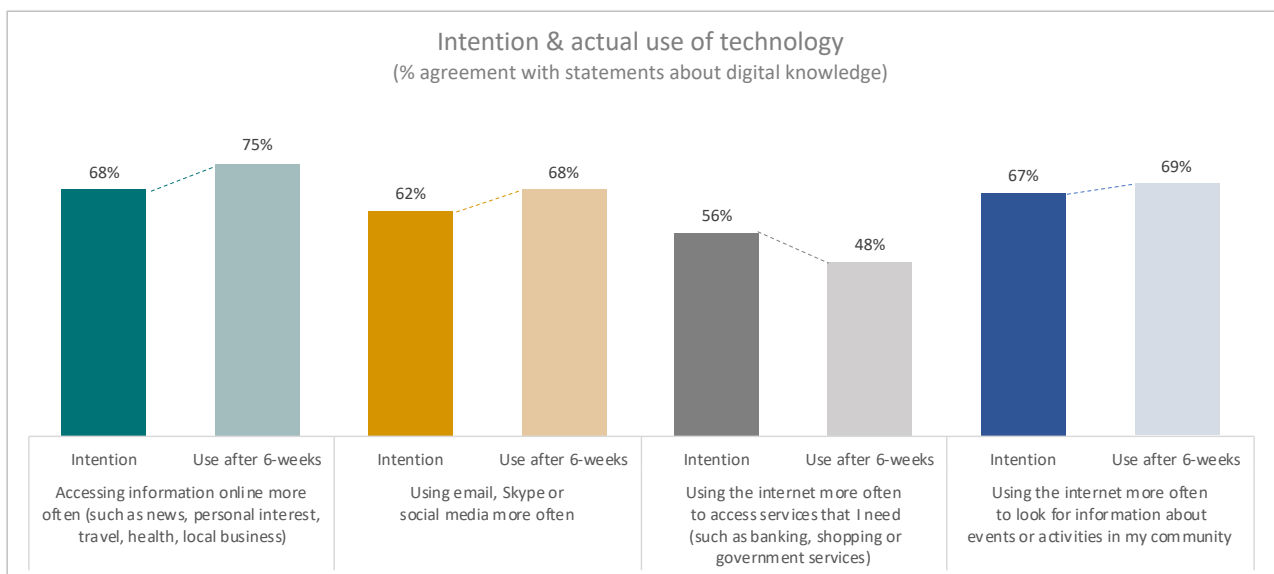


Figure 9 – Changes in digital knowledge due to TSS training

Wellbeing

The program's survey uses three questions to assess changes in wellbeing.

- I am more knowledgeable about topics of interest to me
- I feel more connected to my friends and family
- I have greater peace of mind about my health or other personal issues

Figure 10 shows that a large percentage of respondents feel more knowledgeable and more connected, which leads to greater wellbeing. However only about half of respondents agreed that they have greater peace of mind. This may relate more to the phrasing of the survey question than to the impact of the TSS program.

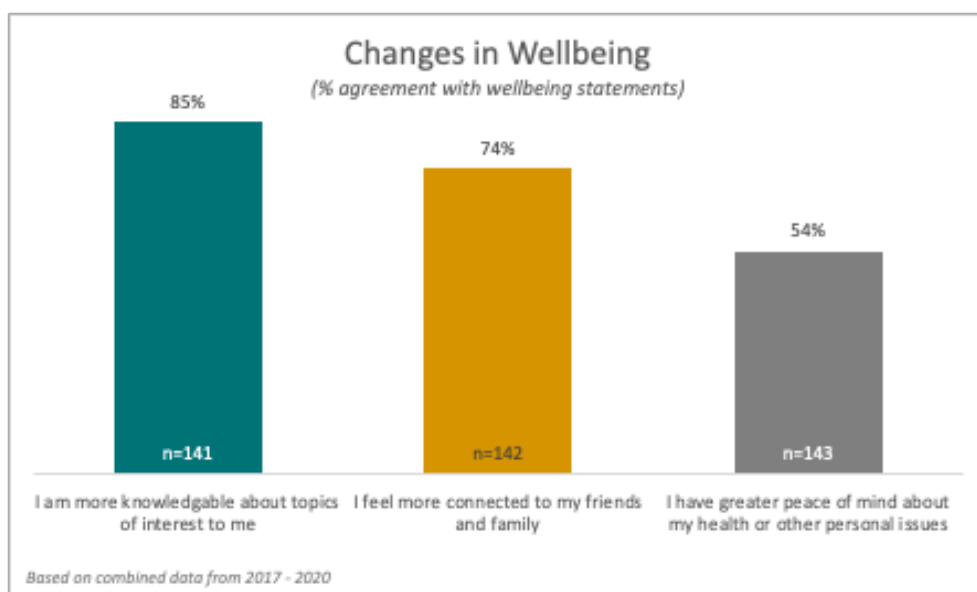


Figure 10 – Changes in Wellbeing

Social participation

The program's survey uses three questions to assess change in social participation:

- I am more engaged with what's going on in the world (current events and issues)
- I am more involved in community activities and events
- I have formed social networks with people outside my local community

Figure 11 shows that a majority of respondents agreed that they are more engaged with what is going on in the world. The program logic assumes that the increased engagement is due to greater knowledge about the world, which is a result of increased digital use.

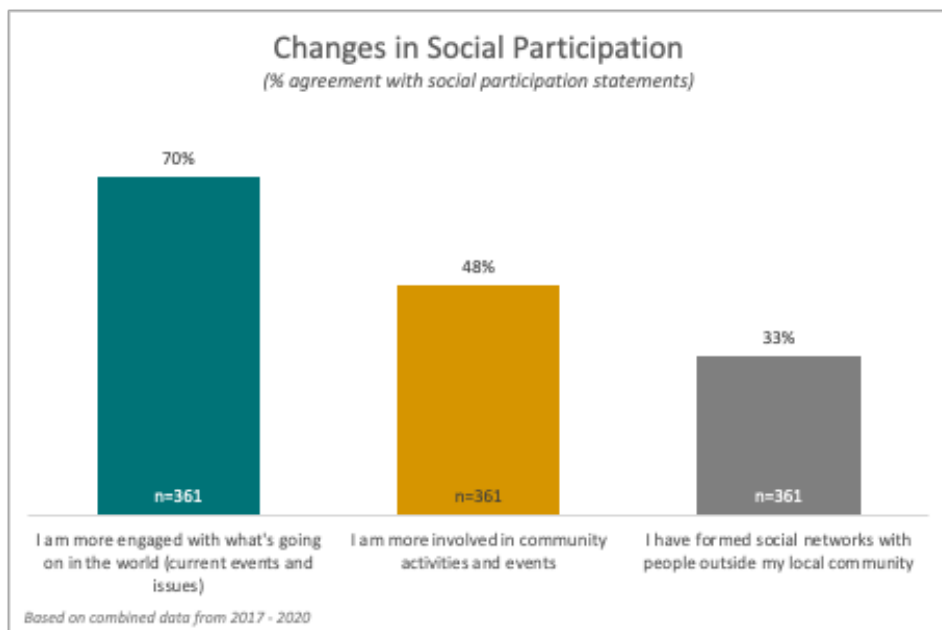


Figure 11 – Changes in Social Participation

The results also suggest that increased knowledge does not translate into behaviours, with only about half of respondents agreeing that they are more involved in community activities and only about a third saying they have formed new social networks.

Active ageing

Active ageing is the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age.⁶ The word “active” refers to continuing participation in social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labour force.

The program’s survey uses three questions to assess changes in active ageing:

- I have access to a greater choice of goods and services that meet my needs
- I have gained new skills to use in my everyday life in areas of interest to me
- I have greater confidence in making informed decisions

Figure 12 shows that a majority of respondents agree with the statements, suggesting an increase in active ageing.

⁶ Active Ageing - A Policy Framework, World Health Organization. Accessed at <https://extranet.who.int/agefriendlyworld/wp-content/uploads/2014/06/WHO-Active-Ageing-Framework.pdf>

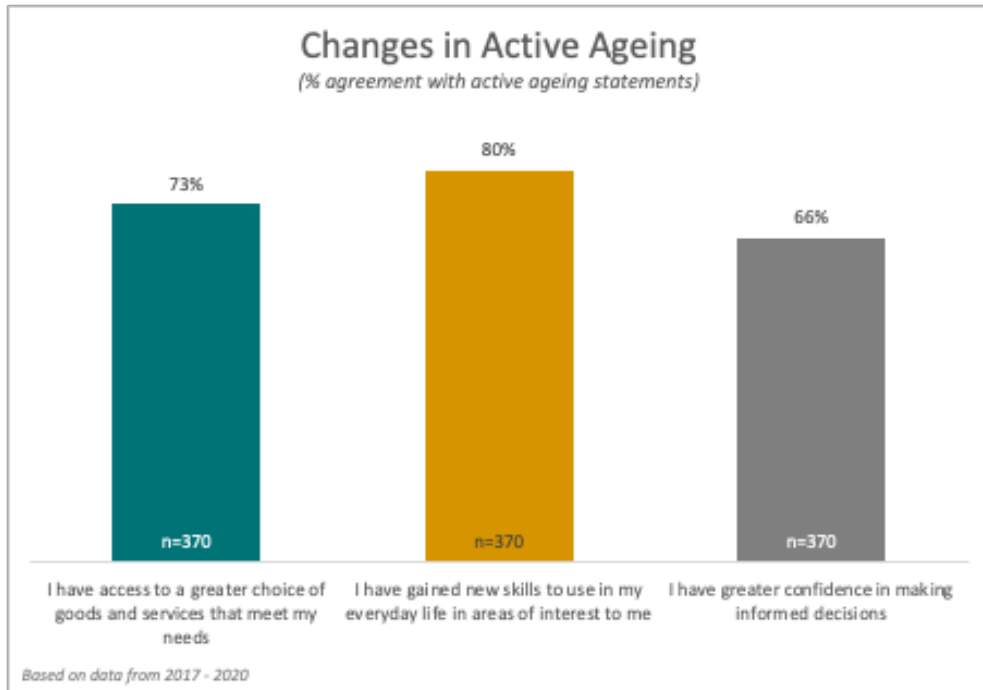


Figure 12 – Impact of TSS on Active Ageing

Caution must be used in interpreting the long-term outcome results

The issue with interpreting the results associated with the longer term outcomes is that the TSS program is only one of a number of factors that may contribute to changes in these outcomes.

It is misleading to assume from these questions that the TSS program has had an impact on the longer term outcomes (because you cannot isolate the impact of TSS from the impacts of the many other factors). It is reasonable to assume that the TSS program has contributed to the longer term outcomes if the results show that seniors are using technology more as a result of TSS and it is accepted that greater technology use leads to improved wellbeing, social participation and active ageing outcomes.

Benefits/Outcomes (from interviews)

In addition to the outcomes measured by survey, interviewees provided a list of benefits they have experienced from TSS training. They include:

TSS increases self-sufficiency

"Immersion in the online economy – online banking and shopping – for people who would otherwise be forced to go to the shops when they're perhaps not as mobile as they were – these are incredibly valuable things for a segment of our community that often goes ignored." Provider

"TSS programs keep participants up to date with ever evolving and changing technology, making sure they don't get 'left behind'." Provider

"Providing seniors with the digital skills and confidence they need to use technology in a digital world." Provider

"Watching the confidence and competence levels of the seniors increasing from one session to the next, and their eagerness to ask questions and participate in activities and 'homework'." Provider

"Tech Savvy for Seniors is a valuable tool for allowing an opportunity for our older citizens to confidently engage in the online world." Librarian

"I think that is TSS's biggest strength - when people understand the basics of technology then they have a better understanding of technology as a whole and they aren't as fearful of technology." Librarian

Increases self-esteem and confidence

An overwhelmingly strong response from providers was the sense of accomplishment seniors felt when participating in the class and learning how to use technology effectively.

"This is one of our most successful and enduring programs with participants extremely happy that they finally understand what the heck is going on in the world of computing." Provider

"Great to see students leave with more confidence and armed with information for where they can find further help and information online." Provider

"Just being shown where to find it on the phone led to increased confidence." Provider

Builds community

"Sense of community and social interaction experienced in the face-to-face classes." Provider

"Face-to-Face engagement is appreciated by the targeted cohort." Provider

"TSS is keeping seniors engaged, provides a sense of community and fosters friendships." Provider

Feeling of support in a group environment

"The rapport it builds between participants and the library staff. Using library staff means they have a contact they can go to with issues and not only upskills the participants but also the staff." Librarian

"Having the platform to bring seniors together in a safe, friendly environment where they can learn about technology and devices to enhance their lives on a social, educational, emotional, and enjoyable level." Librarian

Reduces isolation

"Provides opportunity to learn new things that will allow them to communicate with family across the world, minimising social isolation." Provider

"And the reduction of any feelings of loneliness / alienation would be high on the list: we've had people Facebook their friends from school 50 or 60 years ago and find them and link up. People in their early nineties have done this program and found friends from decades ago." Provider

Program goals and targeting needs

The TSS goals and target groups could be clearer

The original target group was defined in the 2012 NSW Ageing Strategy:

Tech savvy seniors

The Government will provide low-cost training for older people so they can learn to use smartphones, tablets and computers. The training will help older people access information and make contact with family and friends and will target people in their sixties who have not had the opportunity to develop these skills in the workforce. This program will be developed in partnership with existing providers of low-cost training such as community colleges and libraries and will reach across NSW. Partnership with philanthropic and industry bodies will also be explored. (Page 10, NSW Ageing Strategy, 2012)

This definition was later broadened to 'people 60 and above who have not developed these skills'. In subsequent years two other target groups – CALD and ATSI seniors – were added.

The original program documents could not be located and there does not appear to be any documents that identify target groups or set goals or strategies for target groups.

The approach for defining which people and areas are targeted by the program is ad-hoc and driven by libraries and community colleges.

Program courses are not evenly distributed

The distribution of TSS courses and participation varies across the State, as shown in figure 13 which shows the number of sessions delivered in each Local Government Area (LGA). For example, 53 LGAs are not recorded as having delivered any sessions in the last three years while 10 LGAs have delivered between 41 and 100 sessions in the same time. It is unlikely that the large disparity reflects differing needs.

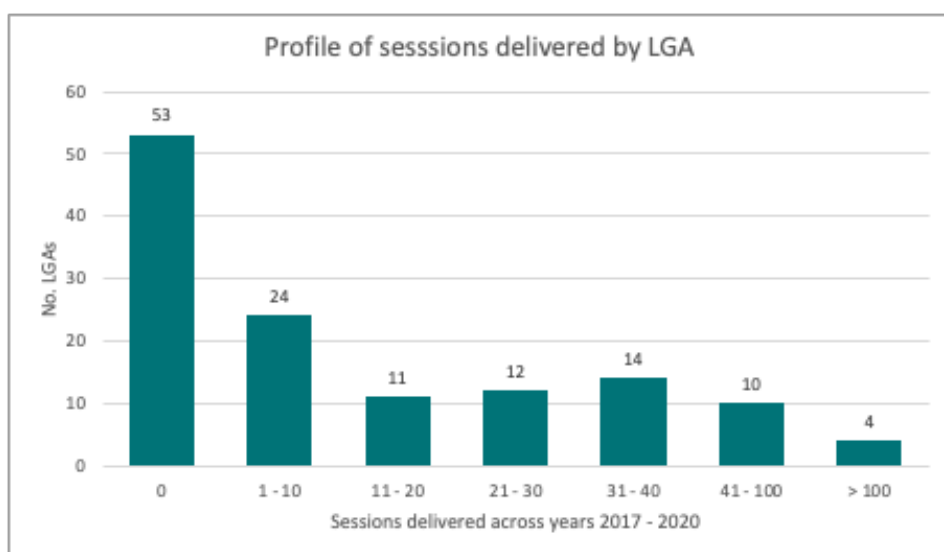


Figure 13 – Profile of sessions delivered

Rural LGAs are not increasing their TSS training

Rural areas are traditionally disadvantaged compared to metropolitan areas. Interviewees identified 'The Great Dividing Range' as a barrier to digital literacy. People living on the inland side are lower SES, have low connectivity and lower affordability of devices. A program focused on greatest need would be expected to direct more resources to rural areas compared to more advantaged areas.

The following graph shows however that while metropolitan and regional city LGAs have been increasing the numbers of TSS courses offered over the past few years, rural LGAs have not.

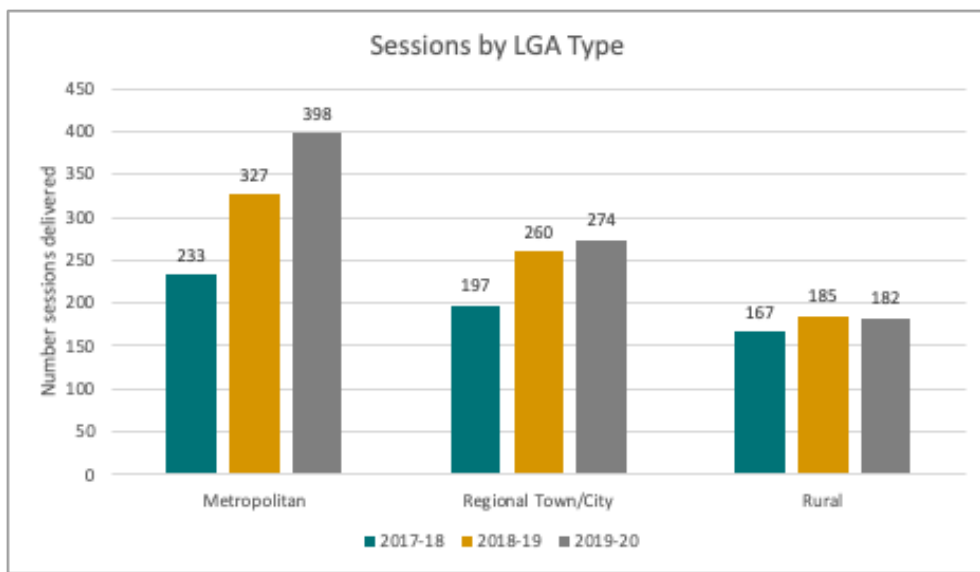


Figure 14 – Profile of TSS sessions by type of LGA

TSS delivery does not appear to be directed to areas of lowest digital literacy

The Australian Digital Inclusion Index (ADII) provides a comprehensive picture of Australia's online participation. The ADII measures three dimensions of digital inclusion: Access, Affordability, and Digital Ability.

To assess the extent that TSS delivery was addressing areas of need (as measured by the digital inclusion index), this evaluation grouped data for LGAs into the ADII regions and compared the number of sessions to the Digital Ability component of the overall ADII.⁷

⁷ The digital ability component of the ADII was used for comparison because it relates to digital skill levels which the TSS program aims to impact.

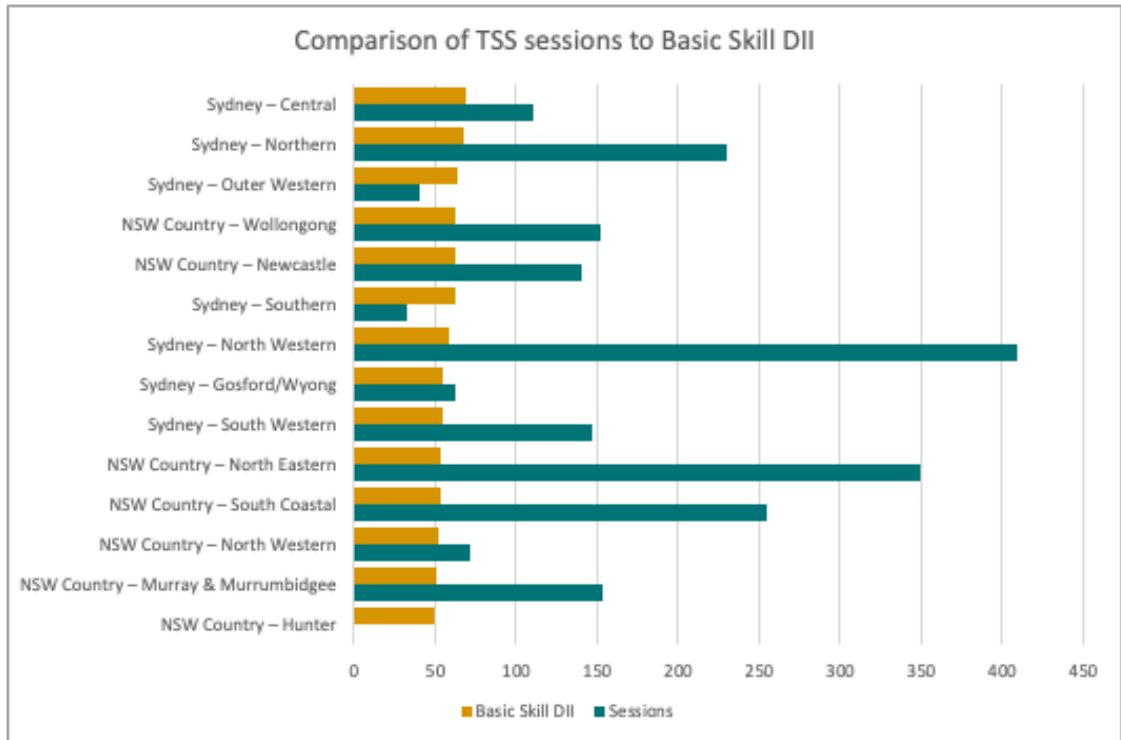


Figure 15 – Comparison of TSS sessions to Areas of digital inclusion

The graph shows a mixed picture. Several regions with lower digital ability, like North Eastern and South Coastal, have been delivering good numbers of TSS sessions however the North Western region, which also has a low digital inclusion index, has not been delivering many TSS courses.

Similarly, regions with higher digital ability, like Sydney Central and Outer Western, have been delivering modest levels of TSS sessions however the Northern Sydney region, which has a relatively high ADII, has also been delivering a high number of TSS courses.

Overall the graph does not show a correlation between the Digital Ability component of the ADII and the delivery of TSS sessions, which suggests that skill levels are not a key factor in driving TSS session delivery.

Promotion is variable

Limited historical central promotion or materials – no program messaging or branding- results in delivery partners creating their own marketing materials and mechanisms, which contributes to poor branding of the program. DCJ has recently started to offer promotion of local courses via its seniors card newsletter which goes out to over 400,000 seniors. While this is a significant support to providers, it should be noted that this newsletter is electronic, therefore would more likely be seen by people with greater than basic digital literacy.

The State Library prepares central materials for all libraries to use and local libraries promote it locally. Some libraries promote in multiple sources, others put up a flyer in the lobby.

One community college promotes via the local leagues club and reaches up to 50,000 people.

The evaluation identified a number of missed opportunities to disseminate the program through organisations which already have trusted relationships with seniors, e.g. retirement villages, aged care facilities, community and cultural organisations.

Limited needs analysis - Course content and topics are decided by delivery agencies

Colleges and Libraries reported that, while they use the prepared course materials, they base the modules that are offered on the interest and enrolment numbers. There was no evidence of formal needs analysis either at Telstra or government levels, however some libraries reported that they conduct their own analysis and would benefit from the data that is collected by Telstra.

Telstra attempts to collect real time data on course needs and develop modules in response to emerging needs. Good examples of this were modules on Zoom and QR codes developed quickly during the pandemic. However, there were comments that some of the course materials are not up-to-date and need refreshing, with an emphasis on the needs of the TSS target group, along with government's goals for this program. For example, the NSW government could be more proactive in embedding use of government services into the program as has been done successfully in South Australia, where there is a stream of courses around use of the Services SA app. DCJ and Telstra respondents reported that updating of course materials is very expensive and time consuming.

Program Governance

Funding

All respondents and interviewees reported an overwhelming response to the program and insufficient funded places, indicating a significant community need. Some, particularly Community colleges, are finding that the level of funding provided is making delivery of the program less and less viable.

Providers reported that the lengthy negotiations and late timing of funding in the last year provided minimal turnaround time to support the required number of students within the remaining months of the year.

Community colleges reported that the funding is minimal, with several noting that they make no profit, or a loss on the courses. Community colleges are struggling with the administrative burden of applying for funds and reporting, a workload that does not reflect the small amounts of funding.

"Marginal whether it's worth continuing." Provider

However, they recognize the significant need in the community and are prepared to provide in-kind support for delivery.

"TSS is about connecting. We make no money out of it." Provider

"We love the program. It's part of us giving back to the community." Provider

The State Library does not keep any of the funding it receives from DCJ. It is all given out in grants. The administrative costs, including 0.6 EFT for coordination, are borne by the library. They find the annual grants process cumbersome for libraries and would prefer not to have to do it every year.

Inconsistent communication across the program

Interviewees and email survey respondents reported a range of perceptions on the degree of flexibility of the program, with some saying they were challenged by having to deliver a certain number of modules to every participant, whilst others offered conflicting views that they valued the ability of people to attend only one session. Some found the Training Guides restrictive in terms of the workshops delivered and the requirement to report against them, whilst others only use the Guides as the basis for part of the session and build the session around participant needs.

"Not every senior requires support with all facets of the modules in the program, however guidelines require attendance to all modules. There should be a provided opt in and opt out approach." Community College

This indicates that communication across the program may not be consistent, or possibly that some providers have built in their own rules for how courses are to be delivered.

DCJ's engagement is increasing

Until recently communication between DCJ, The Department of Education⁸ and the State Library had been reducing over the life of the program, both in number and scope of interactions. Where previously there had been regular meetings between the three organisations to discuss program delivery, Department of Education and State Library representatives said that in recent years meetings have been limited and have focussed on funding, with little engagement from DCJ to check on providers' priorities or needs.

This not only made it difficult for providers to raise any issues, it also was a missed opportunity to share creative ideas and innovations developed across the program.

DCJ's engagement practices have changed recently, and it was noted that DCJ staff have attended recent forums of libraries and community colleges for the purpose of engaging with providers and identifying program delivery issues and priorities.

Monitoring and Evaluation

The current approach to monitoring and evaluation of the courses relies on three online surveys. One survey is completed by trainers, a second survey is completed by participants on completion of a course. Some providers collect survey data after every session, others collect it at the end of a series of sessions. When they complete their survey, participants are asked if they will participate in a further survey, the follow-up survey, which they receive by email six weeks after a course and which asks questions related to outcome development. The follow-up survey has low take-up.

Data collection is burdensome and leads to compromised data

Trainers report that participants need significant assistance to complete the surveys. The survey design has caused confusion amongst participants because it assumes a degree of knowledge most have not attained and mentions subjects they have not completed. In response to this, many providers have asked tutors to support participants to complete the surveys at the end of every session, taking up valuable class time. Trainers have responded to this in different ways, with some providing 30 minutes at the end of each session to complete surveys, while others prefer to email survey links to participants for completion outside class time.

The online trainer survey captures basic demographic and course data (course module, mode of delivery, date, location, language, attendance), which could be more readily provided by libraries and colleges than by individual trainers. It misses an opportunity to capture more relevant information about challenges, successes and outcomes.

The online participant survey asks for more demographic data (age, gender, location, course name, and then asks for more granular detail such as pace of delivery, quality of trainer and materials; information more relevant as quality control to the delivery partner than to overall program outcomes) before asking some brief questions about confidence, skills and intention to use technology. The question design incorporates several questions

⁸ Note that, moving forward, the Department of Education will no longer be administering the program on DCJ's behalf, DCJ will engage directly with community colleges.

into one (e.g. *I think I will use email, skype or social media to communicate with family or friends*), making it not only difficult to answer, but also difficult to analyse to understand outcomes in a nuanced way. i.e. if they answer yes to this question, does it mean they will use all three communication modes, or only some of them?

Both completion of surveys in class and emailing of surveys to participants for completion online present challenges to the integrity of the data. Completing a survey about a course with the help of the trainer is likely to lead to positive bias. Emailing the survey means that only those participants who have the capability to complete it online will provide answers, once again, skewing the data.

Libraries and Colleges report that they do not have access to evaluation data, making this data collection inefficient from their point of view. There is also significant duplication of data collection. Community colleges conduct their own satisfaction surveys to enable them to adapt course delivery. The Education Department collects enrolment data quarterly from colleges and makes payments on that basis. This data could be easily reported to DCJ without using a cumbersome survey that takes up significant class time.

"Challenge to get the data." Provider

"Font too small, survey too long." Provider

"We don't see any of the data." Provider

The Net Promotor Score is misleading

The dashboard and annual Telstra survey report a Net Promotor Score (NPS), which is calculated from a question in the participant survey. Net Promotor Scores are a common indicator used to assess how likely people are to recommend a service or product.

The inclusion of a NPS in the annual evaluation report suggests that it is about the TSS training. However the actual question makes it evident that the NPS is about Telstra:

Considering all aspects of this training session brought to you by Telstra, your State and Local Government, how likely are you to recommend Telstra to a friend or family member?

In other words the TSS training participant survey is being used to determine how likely participants would be to recommend Telstra to others. This question and practice is gathering corporate intelligence – it does not provide the government with any useful information about the training program.

The changing digital context

Be Connected (BC) is the main other digital literacy course

Interviewees mentioned a number of other digital literacy courses currently available, including *Go Digi*, a program targeting seniors in Coffs Harbour, with Infoxchange and Australia Post as the project funders. *Know your gizmo* was a successful program run by high schools, which brought together senior students and older people. It allowed students to teach older people how to use their devices. Libraries have *Computer pals*, an association of retired IT people who help mostly older people.

However, the major provider of digital literacy courses for seniors in Australia is *Be Connected* (BC). BC is very large, with just under \$50m spent over the last 4 years. The program has built over 3,000 partnerships with community organisations to deliver face to face courses and has reached over 580,000 participants⁹ over the last years.

Our findings indicate that most participants do not know the difference between TSS, BC or other courses. They understand that their local library or college is providing a course of interest and they attend. Even some providers did not appear to know the difference between funding sources for their courses.

The major difference between TSS and BC relates to the target audience, with BC requiring enough digital literacy to be able to access and navigate the website, while TSS targets the absolute beginner and teaches basic skills, including even how to use a mouse. The fundamental difference is the self-learning model compared to supported and individualised learning. Interviewees commonly explained that, despite the course materials, TSS is, in practice, led by participant needs.

BC funding was reported to be more flexible, allowing for broader classes to be held e.g. the 'silver fox' program which is a weekly tech support drop-in centre.

"TSS meets people's needs where they're up to." Telstra

"If they can't use a mouse then BC is useless." Librarian who delivers both courses

Be Connected has a large suite of good quality, up-to-date materials

The Be Connected program is well funded. The Federal Government invested \$47.2 million over four years from 2016–17 to 2019–20 and then invested a further \$9.3 million until 30 June 2021. It is likely the program will continue to receive funding.

The level of funding is likely to result in continued maintenance of materials that could be used by TSS participants who have graduated beyond the basic materials offered by TSS.

⁹ McCosker, A., Tucker, J., Critchley, C., Hiruy, K., Walshe, J., Suchowska, R., Barraket, J. (2020) Improving the digital inclusion of older Australians: The social impact of Be Connected. Swinburne University of Technology, Melbourne.

Stories of change

Interviewees offered many stories of positive change to illustrate the TSS program's outcomes. Some representative stories are highlighted below:

- One man in his 70's had no family or friends with whom to connect online. The tutor asked him if he had any interests or hobbies. When the man replied he liked cars, they set him up to research FJ Holdens online and he 'had a ball' doing something of great interest. They are now looking to connect him to an online FJ Holden community.
- A woman had only one reason for attending the class. She wanted to set up a Facebook account so she could be friends with her granddaughter. She was thrilled when her granddaughter accepted her invitation during the class.
- Wagga Wagga has 107 community languages. Through promotion via Red Cross and the Multicultural Council, libraries were able to locate digitally knowledgeable, bi-lingual people to conduct classes. This was often the first employment for some of these people.
- A participant who attended the program at the VERTO Western College site, was isolated and suffered with mental illness. Through engaging with others it allowed her to build her confidence, establish rapport and develop friendships with others in the program in her local community.
- Several seniors embraced digital technologies and use their digital skills to build and maintain contact with family and friends and community. A unique approach we are piloting in the TSS sessions is to provide seniors with a practical example to engage and participate in a joint Library and College Podcast series. This approach is designed to encourage them to practice their digital skills in accessing and listening online to stories of people in their own age group, this approach helps them build and maintaining their Digital skills. <https://mnclibrary.org.au/e-library/podcasts/>
- We've had people in their seventies go and start up online businesses – it's actually inspired them to do that.
- One of our success stories involves one of our Greek TSS sessions, named Mrs R who did the program a few years running, and has since embraced using her iPad and now has an Instagram account for her garden. This participant would be happy to chat (via her daughter interpreting) to someone or we could send through a photograph of her holding her iPad in her garden.
- We have a group of 8 students who met by attending Tech Savvy in Term 1 2019. These students became friends during their course and have continued coming to every session since (52 sessions).
- During Covid lockdown when the College had cancelled all their face to face training, these seniors were one of the first classes to download zoom through instructions over the phone and get back to their course online which was new to all of them.

- The man who was always scared of Facebook even though his family used it a lot but over quite a few years followed the advice and skills he had learnt from TSS and now regularly comes to show me the different things he uses. When he signed up his favourite pub was the only site he used and he dismissed repeated attempts from his wife, children and Grandchildren to “Friend” them. Over time he was able to connect with Friends, family and groups overseas (he followed a team in 3rd Division Scottish football and nearly cried when I showed him he could access results, videos, etc on the internet and Facebook). Now he is a very confident user and often comes in to chat.
- We had a couple who were travelling around Australia and wanted to learn how to use technology to keep in touch. They were very much beginners when they started but were able to practice and learn after TSS and were able to share and keep in touch with family and friends.
- For me personally seeing someone grow more and more confident over the span of the sessions but then also afterwards is amazing. The look of joy when they see their old house on Google maps or see pictures and video on Facebook of family members is the best feeling ever. Knowing we are making a difference in their lives and showing them not only the benefits of technology but how to do it safely and to allow them to participate in a digital world many felt might have left them behind. Librarian
- From the past few years, after attending the courses, I could see many people from CALD background had built up their own confidence to face the challenge by learning new skills. They had improved their digital technology knowledge and widen their social life by using different media.
- Changing attitudes towards using technology- sitting beside people and helping them to get past this barrier and actually help is always a great feeling, and they are usually so grateful, and to see someone increase their confidence after a TSS session is really great. It may be something as simple as transferring photos or changing settings on their phone to make it easier to use.
- One tutor described how she runs into her ex-students when she's down the street. They say things like “thanks for showing me how to use Siri, I’m finding using my phone so much easier now”, another said she’d been doing her own YouTube videos to connect with her bible group during lockdown. Many are over the moon that they can now use video chat to keep in touch with family and friends, especially during these times when travel is restricted overseas.
- One senior who learned how to use the photography functions on her iPad, subsequently travelled and produced a photo book of her journey. She came into another class and showed the tutor what she had achieved as a result of the Tech Savvy Seniors training through our college.

4. Conclusions

The conclusions are based on an integration of the findings and are presented below as responses to the Key Evaluation Questions.

KEQ 1: To what extent has TSS met its intended short & medium term outcomes?

- a. Has the program met its goals for key client groups (i.e.: seniors in NSW (in general), seniors from Aboriginal and Torres Strait Island backgrounds, and seniors from CALD (culturally and linguistically diverse) groups)?

There is an immediate challenge in answering this question, due to the lack of clearly defined objectives and outcomes for the program against which to evaluate. We have based our answer on the program logic model developed from our discussions with program managers and from previous evaluations. This model articulates a number of short and medium term outcomes for the program's general target group identified as 'people in their sixties who have not had the opportunity to develop these skills in the workforce'. There were no specific goals for subgroups such as ATSI, CALD or others.

The evidence available to measure the outcomes was limited to the program's survey results together with interviews. However, once again, there were limitations. In the absence of a defined logic model and goals, it is very hard to develop an appropriate survey to measure outcomes, therefore, some of the survey questions did not appear relevant to the outcomes described in the program logic model. In addition, the timing of the survey (6 weeks post course) is very early to measure intermediate and longer term outcomes such as sustained, increased use of digital technology, or increases in wellbeing and social participation.

However, despite these limitations, we conclude that the TSS program does contribute to most of the outcomes as described in the program logic model.

Program providers reported observing increases in a number of key outcomes areas such as self-sufficiency, self-esteem and confidence in using online resources, building community, feeling supported in a group environment and reduction of feelings of isolation. Participants increased their use of digital technologies to mediate relationships with close social networks, to support increased involvement with community life and to access information online. They did not significantly increase their use of digital technology to access government and business online services.

Where outcomes have been partially or not met, for example where only 54% of program participants reported having greater peace of mind about their health or other personal issues, it appears to be related more to the phrasing of the question, or the possibly inappropriate linking of 'peace of mind about health' to increased digital skills, rather than a failure of the program to achieve its goals.

TSS meets an important need to assist seniors with managing the activities of their daily lives. Importantly, it is accessible, free and delivered in many community languages. All respondents highlighted a strong need for the very basic skills training offered by TSS. Courses are oversubscribed, have waiting lists and providers report strong demand for the most basic courses along with high satisfaction of course participants.

TSS contributes to increased social connectedness, with a strong trend of friendships being formed during the courses, family and friend connections being made online as a result of skills gained from the course and new skills enabling seniors to function more independently in their daily lives.

Although TSS provides good access to CALD communities through resources in several community languages and multilingual trainers, some people still experience a barrier to participation due to dialect issues or the uneven geographical distribution of multilingual trainers.

The reach into the Aboriginal and Torres Strait Islander cohort is weak. There is no central incentive for course providers to target any specific communities, no specific resources for Aboriginal and Torres Strait Islander communities, and there does not appear to be any monitoring of Aboriginal or Torres Strait Islander participation. The fact that the course is oversubscribed by the general population is a disincentive for most providers, with some exceptions, to put in the efforts required to provide courses for the Aboriginal and Torres Strait Islander population.

KEQ 2: To what extent is the TSS program design appropriate?

To what extent is the TSS program design appropriate for achieving the NSW Government's goals?

We have included under the definition of 'design', the planning, funding, monitoring and overall strategic direction of the program. The original program strategic documents have been lost over time and there have been no clearly articulated program logic, strategy or measurable performance goals or targets. Needs of the target population are largely defined by program providers according to enrolment figures and waiting lists, not from a formal needs analysis and do not appear to be linked to overall government strategy, apart from the general direction of improving the digital literacy of all seniors in NSW. The ill-defined goals and target groups make it challenging for managers to obtain an overview of program performance or to identify the need for a change in strategic direction to ensure alignment with government goals. One example of this is our finding that the course distribution is not linked to areas of lowest digital literacy, in fact, the findings suggest the reverse is happening, possibly because wealthier LGAs are able to provide more courses.

Telstra attempts to obtain 'real time' data on enrolments and needs, in order to provide an agile program response to participants, however the data collection for this is a burden on both providers and participants and it results in a reactive, piecemeal response rather than a strategic and considered response. The benefits of this included being able to provide courses on emerging needs during the pandemic, but the lack of strategic overview of the program means there is no drive for achieving better outcomes for the more marginalised communities such as Aboriginal and Torres Strait Islanders.

A major outcome of the lack of monitoring and program overview is that there are missed opportunities at a strategic level. For example, there are opportunities that could extend the reach of the program, such as partnering with other organisations (e.g. aged care home operators, CALD groups, ATSI organisations) to provide courses in settings which are more accessible to seniors from lower socioeconomic, or marginalised groups.

The current funding process is lengthy and experienced as a burden by providers. The annual nature of the funding agreement means that providers do not have any certainty that the program will be offered. They often do not know their budgets until well into the year, which hinders providers' ability to plan ahead or develop alternative or innovative learning approaches.

Communication within the program is also an opportunity for improvement. Over the years, the number of meetings between program managers and providers have reduced, and there have been missed opportunities to share innovations, learnings and news across the program. This has recently been significantly improved, with program managers attending group meetings of both library and community college providers for information sharing.

Promotion of the courses is ad-hoc and reliant on providers. As with other aspects of the program, it would benefit from a more strategic approach.

KEQ 3: Is there still a need for TSS digital literacy courses?

Is there still a need for TSS digital literacy courses across NSW considering the range of digital literacy training courses now available?

a. If so, what is TSS role in the greater digital literacy landscape?

As government and commercial services move towards online service provision, there is recognition of the increasing need for ensuring digital literacy across the population, to make sure people are able to independently conduct the activities of their daily lives. This especially applies to people aged over 60, who may not be keeping up with the latest digital advances.

In recent years, many digital literacy courses have become available within the NSW community, mostly free courses aimed at local communities. These are dwarfed by the Be Connected program, launched by the federal government four years ago with just under \$50m of funding over that time. This program provides both online and face to face digital literacy courses targeted at seniors and has reached 580,000 participants over its first four years of operation. The program has formed over 3,000 partnerships with community organisations to deliver face to face programs. Be Connected is a comprehensive and sophisticated digital literacy program, however it is currently delivered mostly online and is targeted at people with enough digital literacy to be able to access the self-learning modules.

Within this environment, TSS still holds an important and potentially unique place in the current context of digital literacy training - the provision of courses to absolute beginners. This evaluation found an ongoing and significant need across the state for basic digital literacy training in the senior population. TSS's funded providers are delivering the most basic TSS modules in a supported learning environment which meets the needs of seniors with limited digital skills. Seniors are subscribing to these basic courses and showing preference for face to face learning and the flexible learning offered by providers, who reported opening up their courses to a trouble shooting approach to support specific issues experienced by participants.

Importantly, within this context, TSS has an opportunity to focus its population targeting to ensure that the most marginalised seniors in NSW are supported to improve their digital literacy.

KEQ 4: To what extent has TSS delivered value for money?

Two estimates of value were determined – the first was comparing the unit cost of delivery for libraries versus community colleges. The second estimate of value was a Social Return on Investment calculation.

Efficiency of delivery

The efficiency of libraries and community colleges was compared using both unit cost per enrolment and unit cost per course delivered. The results are shown below:

	Funding per enrolment		Funding per course	
	Libraries	Colleges	Libraries	Colleges
2017/18	\$31	\$33	\$290	\$511
2018/19	\$28	\$49	\$167	\$381
2019/20	\$28	\$79	\$119	\$473

The analysis shows that delivering the program through libraries is more efficient than delivering through colleges.

Social Return on Investment

Value for money was calculated using the Social Return on Investment (SROI) methodology. Both the 2014 evaluation of the TSS program and the 2021 evaluation of the 'Be Connected' program used SROI to assess the cost effectiveness of the respective programs.

Summary results

The SROI analysis was conducted for the program period 2017-2020. The analysis also estimated the benefits which are expected to accrue for three years beyond the program period.

Over the period of delivery (2017 – 2020) the program is estimated to have generated \$8.5 million in benefits for an investment of \$2.5 million. Including the total benefit that is expected to accrue for the three years beyond the program period, and using a discount rate of 7%, the TSS program is expected to generate social value of \$6.64 for each \$1 invested, which represents value for money.

This compares favourably with the 2014 evaluation which calculated a return of \$6.78 for each \$1 invested and the 'Be Connected' program which calculated a return of \$4.01 for each \$1 invested.¹⁰

The full Social Return on Investment analysis is included as attachment 3.

¹⁰ McCosker, A., Tucker, J., Critchley, C., Hiruy, K., Walshe, J., Suchowerska, R., Barraket, J. (2020) Improving the digital inclusion of older Australians: The social impact of Be Connected. Swinburne University of Technology, Melbourne.

KEQ 5: To what extent has the COVID-19 pandemic impacted on digital divide training needs?

The COVID-19 pandemic created situations of potential isolation for many seniors. Participants reported that the pandemic made them more reliant on digital technology not only for social connection but also to keep up with the latest COVID related information. The greatest impact of the pandemic in relation to digital training needs, was its reinforcement of the importance of social connection through digital technology and therefore the value of digital literacy training. This was seen in increased demand for courses teaching video conferencing, such as Zoom, which empowered people to attend other classes or to maintain connections with family and friends. The program's agility in development of courses in response to emerging needs such as how to use QR codes and the NSW services App empowered people to go out in the community.

The requirement for social isolation led to some innovations in course delivery to allow people with more than basic skills to continue their learning via online courses, however, seniors who were complete beginners were often excluded due to their lack of online skills. Despite some success with online learning, the majority of TSS participants still prefer to receive their training in person.

KEQ 6: How can the TSS program deliver better outcomes for ATSI people?

KEQ 6 asks for a recommendation and is addressed in the next section.

5. Recommendations

5.1 Establish clearly defined program strategic documentation which defines TSS's place in the wider digital literacy training context as a provider of basic digital training to absolute beginners.

This should include:

- An agreed program logic model which identifies what success for the program looks like and links the program outcomes to the NSW government's ageing strategy.
- Clear target populations.
- A formal needs analysis of the target population to ensure the program is delivering the appropriate training to the people most likely to benefit.

5.2 Develop a simple, centralised business plan with performance monitoring and reporting.

This should include:

- An annual business plan with targets and key performance indicators for each activity and outcome described in the logic model.
- A simple and focussed monitoring system to collect only the most relevant information relating to program activities.
- A simple mechanism for regular (say quarterly) management performance reporting.
- Regular (say biannual) meetings between program managers and providers to exchange information, encourage sharing of innovative delivery approaches and ensure feedback is provided for adaptation of program delivery.
- A separate and less regular (say annual) process for outcomes reporting.

5.3 Review delivery design to improve value

This should include:

- A detailed review of the efficiency of community colleges and municipal libraries to understand the drivers of libraries' efficiency and the causes of the inefficiency of community colleges.
- Establish efficiency performance measures for providers. Consider participant unit cost as the key measures and collect the performance data for each provider on a quarterly or course basis (it should be part of their acquittal process).
- Realign funding so that greater funds are directed to more efficient delivery partners. This might mean moving funds away from all inefficient providers

(colleges and libraries) or it might mean directing funding away from colleges as a group and reinvesting in the more efficient library system.

5.3 Expand program reach by building partnerships with community organisations with established links to target populations. (Incorporates KEQ 6 - how to deliver better to ATSI population)

This should include:

- Identification of key target groups such as ATSI, CALD, low SES groups, building an understanding their needs and geographical distribution.
- Centralised establishment of partnerships with relevant community organisations to explore delivery of TSS through trusted community sources.
- Exploration of other delivery sites such as aged care providers to improve access.
- Establishment of targeted grants directed at priority population groups.
- Development of resources targeted at priority populations such as ATSI.
- Adaptation of course structure or delivery to encompass broader participant needs.

5.4 Streamline program delivery.

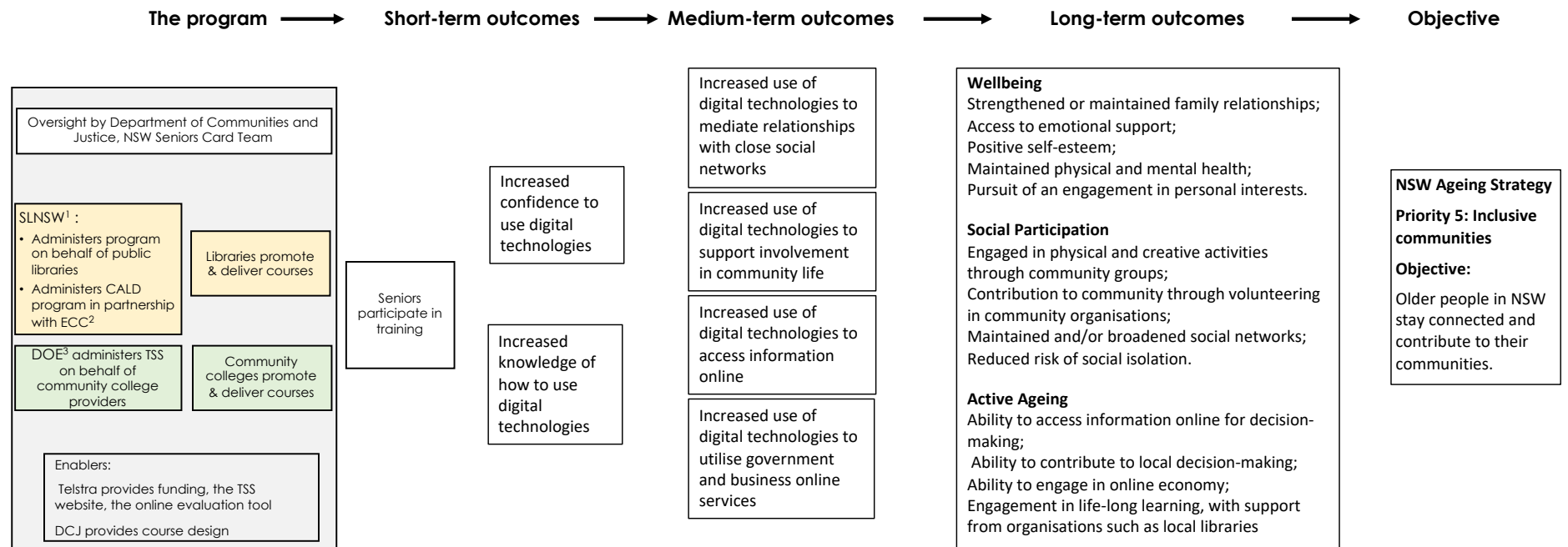
This should include:

- Simplify the funding process to minimise the burden on providers.
- Provide centrally developed promotional materials aimed at the program's target populations.
- Encourage flexibility of course delivery, for example fund ongoing tech cafes where seniors can attend for specific support.

6. Attachments

6.1 Program logic model

The TSS program logic is shown below. The original program documentation has been lost over several changes of staff, however this model was put together from discussions with program managers and models developed for previous evaluations. This model has been used to guide development of the evaluation questions and the measures that will be used to answer them.



Note that this program logic relates to the program to date. Moving forward, the Department of Education will not be administering the program on DCJs behalf, DCJ will be engaging directly with colleges.

6.2 Interview list

Name	Role	Organisation	Stakeholder type
Stephen Chanphakeo	Director	Department Communities and Justice	Program director
Pater Taylor	Manager	Department Communities and Justice	Program manager
Clayton Smithwick	Project Officer	Department Communities and Justice	Evaluation Project manager
Surinder Kaur	Librarian	Coffs Harbour	TSS provider
Wayne Monkley	Librarian	Campbelltown	TSS provider
Robyn Keenan	National RTO Manager	ACE Community Colleges (Northern NSW)	TSS provider
Sarah Cimino	Community Engagement Officer	Community Colleges Kiama & Shoalhaven	TSS provider
Terry	Tutor for Tech Savvy Seniors	Sydney Community College	TSS provider
Heather Rea	Senior Specialist, Strategy and Inclusion, Sustainability, External Affairs & Legal (SEAL)	Telstra	Program partner
Shauna Miller	Cooperative Coordinator	State Library NSW	Program Administrator
Cameron Morley	Manager, Public Library Services	State Library NSW	Program Administrator
Sophie Preston		Department of Education	Program Administrator
Mariette Mikhael	Project Coordinator	Ethnic Communities' Council of NSW	Partner/ provider
Daragh Galvin	Senior Policy Lead	eSafety Commission	Be Connected Program administrator
Vicki O'rouke	Senior Library Officer (CALD & Indigenous)	Wollongong Library	TSS provider
Megan Jordan-Jones	Library Services Coordinator (Indigenous)	Bega Valley Shire Council	TSS provider
Angela Chaperon	Involved with development of ageing strategy	FACS NSW	NSW Government
Christine Ahn	Trainer - Korean	Ethnic Communities' Council of NSW	TSS trainer
Ye Lu	Trainer - Mandarin	Ethnic Communities' Council of NSW	TSS trainer
Susan Lister		Wallagoot resident	TSS participant
Dianne McNab		Bathurst resident	TSS participant
Janet Heslep		Yerrinbool resident	TSS participant

6.3 Social Return on Investment Calculations

Social Return on Investment

Value for money was calculated using the Social Return on Investment (SROI) methodology. Both the 2014 evaluation of the TSS program and the 2021 evaluation of the 'Be Connected' program used SROI to assess the cost effectiveness of the respective programs.

Summary results

The SROI analysis was conducted for the program period 2017-2020. The analysis also estimated the benefits which are expected to accrue for three years beyond the program period.

Over the period of delivery (2017 – 2020) the program is estimated to have generated \$8.5 million in benefits for an investment of \$2.5 million. Including the total benefit that is expected to accrue for the three years beyond the program period, and using a discount rate of 7%, the TSS program is expected to generate social value of \$6.64 for each \$1 invested, which represents value for money.

This compares favourably with the 2014 evaluation and the return calculated for the 'Be Connected' program.¹¹

Analysis details

The methodology used in this evaluation follows a five stage approach recommended by Social Value International, the NSW Government Social Return on Investment Approach Guide (July 2020) and the NSW Government Guide to Cost-Benefit Analysis (2017).¹²

Stage 1: Establish scope and stakeholders

The scope of the analysis includes the period from financial years 2017/18 to 2019/20. It also includes the benefits accrued from the short and medium term outcomes, and it includes the discounted value of the benefits over three years following the program period.

The stakeholders considered for the SROI included: Participants of the program, Department of Communities and Justice, Telstra, State Library NSW, NSW Department of Education, municipal libraries, community colleges and trainers.

Stakeholder perspectives from survey and interview informed the valuing of the input investment and outcomes that developed. The period of focus was the financial years from 2017-18, 2018-19 and 2019-20. The year 2019-20 was impacted by the COVID-19 pandemic, which resulted in slightly reduced program activity.

¹¹ McCosker, A., Tucker, J., Critchley, C., Hiruy, K., Walshe, J., Suchowerska, R., Barraket, J. (2020) Improving the digital inclusion of older Australians: The social impact of Be Connected. Swinburne University of Technology, Melbourne.

¹² <https://socialvalueint.org>

Stage 2: Map inputs, outputs and outcomes

Inputs (investments)

The value of inputs was estimated over the three year period included in the analysis. The main investment of the program stakeholders included:

Stakeholder	Investment	Commentary	Value over 3 years
Program participants	Time and travel	Travel was costed using the number of participants, number of sessions attended and the daily cost of seniors travel in NSW	\$299k
DCJ	Program funding of \$500k pa Administrative costs (based on 0.5FTE)	Governance time assumed that 0.3 FTE was applied to this activity	\$1,590k
Telstra	Direct funding of \$50k pa Website hosting @ \$25k pa Program oversight by Telstra employee @ 0.3 FTE	Telstra is involved in multiple programs, including TSS in 3 states. Website hosting assumed the cost would be apportioned across the 3 programs. Program oversight assumed that 0.1 FTE was applied to the NSW TSS program	\$360k
State Library NSW	Staff time to administer the grant process to libraries and provide general oversight	Assumes 0.5 FTE	\$98k
NSW department of Education	Staff time to administer the grant process to community colleges and provide general oversight	Assumes 0.5 FTE	\$149k
Libraries & community colleges	Staff time in administering courses and hiring trainers	Covered by grant monies however most libraries advised they had added additional time	na
Trainers	Time to deliver courses + travel time	Covered by grant monies	na

Outputs

The key outputs were the number of program participants, measured as the number of enrolments reported in Telstra's annual evaluation reports. Over the 3 year period 39,844 enrolments were recorded.

Outcomes

The program logic identifies two short-term outcomes of:

- Increased confidence to use digital technologies
- Increased knowledge of how to use digital technologies

The program logic also shows four medium term outcomes of connectedness:

- Increased use of ICT to Stay connected with family & friends
- Increased use of ICTs to support community involvement
- Increased use of ICTs to access information
- Increased use of ICTs to utilise online services

The medium term outcomes are in contrast to the Be Connected Theory of Change which recognises a single medium term outcome - 'connectedness'.

The four types of connectedness in TSS's program logic are actually dimensions of the same underlying outcome of increased connectedness. In assigning a value to connectedness, the four dimensions provide a challenge because they each contribute some value to the underlying outcome however the value of each dimension is not additive.

To arrive at a financial value for connectedness, a principal component analysis was performed on the participant survey data which provided a set of contributions that each dimension makes to the outcome. Based on the analysis, the following table shows the contribution that we assume each dimension contributes to the outcome.

Outcome	Dimension	Contribution
Increased Connectedness	Increased use of digital technology to connect with family & friends	30%
	Increased use of digital technology to support community involvement	20%
	Increased use of digital technology to access information	20%
	Increased use of digital technology to utilise online services	30%

Incidence of outcomes

The incidence of outcomes was estimated based on the response received from the participant evaluation forms. The percentages in the table are taken to reflect the whole population of program participants.

Outcome	Percent of participants who experienced an increase in outcome
Increased confidence to use digital technologies	57%
Increased knowledge of how to use digital technologies	51%
Increased connectedness:	
Increased use of digital technology to connect with family & friends	66%
Increased use of digital technology to support community involvement	68%
Increased use of digital technology to access information	69%
Increased use of digital technology to utilise online services	43%

Stage 3 – Valuing the outcomes

Since it is difficult to financially value outcomes directly, the methodology assigns a proxy value to each outcome.

Short-term outcome proxies and their value

The following table shows the proxies used to value the two short-term outcomes.

Outcome	Proxy	Proxy value	Rationale	Source
Increased confidence to use digital technologies	Cost of private provider training & support	\$255	TSS increases the confidence of participants by creating the opportunity for learners to obtain the skills required to navigate computers and online and improve their digital self-efficacy over repeated lessons, including supported ones. Using a private provider for teaching of seniors over 3 one-hour lessons is assumed to develop the same level of confidence in a similar local-coaching context as TSS.	Average cost of 3 personal digital skills sessions, sourced from private providers
Increased knowledge of how to use digital technologies	Cost of textbook aimed at seniors	\$50	Taking the Be Connected (2020) and TSS (2014) SROI's as precedents, the cost of textbook is used as a proxy for acquiring knowledge about computers and the internet.	Cost obtained from bookshop of a hard copy basic computer skills book aimed at seniors

Medium term outcome proxies

The following table shows the financial proxies for each dimension of the connectedness outcome:

Dimension of Outcome: Increased Connectedness	Proxy	Proxy value	Rationale	Source
Increased use of digital technology to connect with family & friends	Average cost of treatment for anxiety due to isolation (4 sessions)	\$346	Taking the Be Connected (2021) SROI as a precedent, the literature indicates that loneliness and social isolation are risk factors for mental health and can be a burden on the health system. The cost savings arising from the avoided treatment of loneliness (costs to see physician/counsellor) is used as a proxy for the value of training in ICT to enable participants to communicate with family and friends. Valuation method: Avoided public cost	Medicare schedule
Increased use of digital technology to support community involvement	Average cost to access information about community events using telephone	\$13	Taking the 2014 TSS SROI as a precedent, trainees who increased their use of digital technology to access information about community events or to support their involvement/attendance. Without digital access seniors would revert to word of mouth or telephone. The cost of using alternative communications, such as a telephone, therefore provides a proxy for the value of using ICT for this purpose. Valuation method: Telstra call cost	Telstra call rates
Increased use of digital technology to access information	Average cost to travel to alternative source of information - e.g. library	\$130	Tech Savvy Seniors boosts digital access to information linked to personal interest, travel, health, local businesses, housing and government services. Without the digital access this information would have to be found from sources such as their local library or shop fronts. The cost of travelling to a	Transport NSW cost of seniors travel

			library or shopfront provides a proxy for the value of using digital technology for this purpose. Valuation method: Travel cost	
Increased use of digital technology to utilise online service	Estimated savings if transactions moved online	\$490	Transferring in-person or telephone transactions to online transactions can create a cost saving for the organisation offering the service or product. A Government report - Digital government transformation 2015 - estimated that substantial savings would be gained from moving from traditional methods of transaction to online. Valuation method: Public cost saving	The Digital Government Transformation

Stage 4: Establishing Impact

Impact refers to the extent that other factors may have contributed to the outcomes being claimed by the program. The methodology considers four types of impact:

- Deadweight
- Displacement
- Attribution
- Drop-off

Deadweight

When valuing outcomes the SROI methodology subtracts the estimate of the value of outcomes that would have occurred even if the program had not been implemented. The deadweight estimates for the TSS outcomes are:

Outcome	Dead-weight	Rationale
Increased confidence to use digital technologies	30%	<p>The 2014 TSS Evaluation assumed 0% with rationale: Trainees boosted their confidence by learning with others, having the opportunity to relate to their peers (regarding digital skills) and being supported and motivated by a trained instructor. No 'complete beginner' trainees reported opportunities outside of Tech Savvy Seniors to learn about ICTs in this type of environment.</p> <p>The 2020 'Be Connected' SROI assumed a 50% deadweight with rationale: As in the increase in ICT skills, participants are likely to access other opportunities if they wish to practice their ICT skills.</p> <p>The value of deadweight depends on 1) accessibility to alternatives open and 2) confidence to access the alternatives. Since 2014 the number of options for seniors to learn digital skills has increased, fuelled in part by the increased awareness of the digital divide. A number of seniors would have taken advantage of these alternatives in the absence of TSS. Conversely, many of the TSS seniors are very low skilled with low confidence which may have dissuaded them from going to other courses in the absence of TSS.</p> <p>This evaluation concludes that the 'Be Connected' estimate of 50% is too ambitious for this cohort and that a more realistic figure is that up to 30% of change would have happened without the TSS program.</p>
Increased knowledge of how to use digital technologies	30%	The 2014 TSS evaluation assumed 2% with rationale: Increased knowledge about ICTs is expected to be proportional to increases in use and integration of ICTs to trainees' lifestyles.

Outcome	Dead-weight	Rationale
		<p>The 2020 'Be Connected' SROI used 50% with the rationale: Participants would likely obtain ICT skills without the 'Be Connected' program due to the presence of other similar programs such as Go Digi, TSS and others.</p> <p>For the same rationale used in explaining the 30% value for the confidence outcome, this evaluation concludes that a more realistic figure for participants acquiring the knowledge if TSS was not available is 30%.</p>
Increased use of digital technology to connect with family & friends	25%	<p>The 2014 TSS evaluation considered the connectedness outcomes as a group when estimating the deadweight factor. It used a 2% value with rationale: ACMA Communications Report (2012-13) traces a 2% increase during 2012-13 in the number of people aged 65 and over who are using the internet on a frequent basis. It therefore assumes there would be a similar 2% increase in following years if TSS had not been implemented.</p> <p>The 2020 'Be Connected' SROI uses 25% with the rationale: As in the increase in ICT skills, participants are likely to access other opportunities if they wish to practice their ICT skills.</p> <p>Since 2014 the use of social media for staying connected is more prevalent generally, and the desire of seniors to engage would likely lead to a greater percent than 2% even without TSS. Conclusion: This evaluation therefore concludes that a deadweight of 25% is more realistic.</p>
Increased use of digital technology to support community involvement		
Increased use of digital technology to access information		
Increased use of digital technology to utilise online services	10%	<p>The 2014 TSS evaluation used the same deadweight for this dimension as for the other 3 dimensions of connectedness, however the survey results show that only 43% were connecting for online services compared to 68% for other reasons, suggesting hesitancy in using online services. The feedback suggests that a causal factor could be the greater risk perceived in using online services. This evaluation has therefore adopted a deadweight value of 10%, assuming a lower chance of seniors utilising online services in the absence of TSS.</p>

Displacement

The SROI methodology also considers the extent that a program displaces or impacts the outcomes of different programs. The outcomes of the TSS program may lead to more online activity by seniors which in turn may result in less physical interaction with a range of services. This evaluation considers these effects minimal because of the trend in other services and activities to move online. For the purpose of this SROI it is assumed that there is no displacement of other outcomes.

Attribution

The SROI methodology recognises that other sources could contribute to the same outcomes as TSS. It refers to this as attribution. The following table estimates the percent attribution from other sources:

Outcome	Attribution	Rationale
Increased confidence to use digital technologies	5%	<p>The 2014 TSS SROI estimated that 5% of this outcome was due to external sources: Trainees explained that by offering opportunities to learn with others, relate to one's peers and be supported and motivated by a trained instructor, TSS was the dominant attributing factor to boosts in confidence.</p> <p>The 2020 Be Connected SROI used 20% with rationale: Our findings show that participation in Be Connected has lifted the confidence of participants in the use of ICT significantly. However, we estimate that prior learning and the activities of other sources to have contributed at least up to 20% to the increase in confidence in participants.</p> <p>Discussion: Many TSS participants come with little prior learning and it is assumed most of their confidence comes from TSS sessions. The proportion of outcome attributable to external sources is therefore estimated at 5%.</p>
Increased knowledge of how to use digital technologies	10%	<p>The 2014 TSS SROI estimated that 10% of this outcome was due to external sources, with rationale: Interview and survey data indicates that program participants also received help to learn to use ICTs from family and friends, IT professionals, libraries, books or computer stores. Trainees described additional help, however, as piecemeal and rarely in a fully supportive environment. Although supplementary help was available to most trainees, Tech Savvy Seniors was identified as the primary environment in which knowledge of ICTs was developed.</p> <p>The 2020 Be Connected SROI used 80% with rationale: Based on the baseline survey, although most respondents (96%) were using the internet on their own before commencing Be Connected, 18% report not knowing how to complete any operational tasks. Thus, we have estimated the contribution of other activities to the development of participants' knowledge to be 80%.</p> <p>Discussion: TSS participants are low skilled and it is unlikely they would pick up adequate knowledge through other channels.. The proportion of outcome attributable to external sources is therefore estimated at 10%.</p>
Increased use of digital technology to connect with family & friends	25%	<p>The 2014 TSS SROI considered the connectedness dimensions as a group and estimated that 30% of the change was due to external sources with rationale: Interviewees reported that family or community members often encouraged them to adopt ICTs to communicate. In some cases, businesses required transactions to be conducted online. Interviewees explained that these contextual factors helped motivate them to integrate ICTs into their lifestyles.</p> <p>The 2020 Be Connected SROI used an attribution of 25% with rationale: As the Be Connected program had focused sessions on using ICT for communication, with the incentive to connect with family and friends it is highly likely for the Be Connected program to have contributed significantly to the increased connectedness among participants. However, we still estimate that up to 25% of this increase is contributed by activities of other organisations and activities.</p> <p>Discussion: As the skill level of participants is very low it is less likely they would gain skills from other sources without TSS. The proportion of outcome attributable to external sources is therefore estimated at 25%.</p>
Increased use of digital technology to support community involvement		
Increased use of digital technology to access information		
Increased use of digital technology to utilise online services	10%	<p>The 2014 TSS evaluation used the same attribution for this dimension as for the other 3 dimensions of connectedness, however the survey results show that only 43% were connecting for online services compared to 68% for other reasons, suggesting hesitancy in using online services. The feedback suggests a causal factor could be the greater risk perceived in using online services. This evaluation therefore adopts an attribution value of 10%, assuming a lower chance of seniors utilising online services in the absence of TSS.</p>

Drop-off

Outcomes drop off over time, the amount of drop off can vary due to a wide range of factors. In order not to over claim the impact of outcomes over time a percentage drop-off is estimated and applied to the value of the outcomes. The drop-off table is shown here:

Outcome	Drop-off	Rationale
Increased confidence to use digital technologies	50%	<p>The 2014 TSS SROI assumed a drop off of 90% with the rationale: Confidence as a result of Tech Savvy Seniors is expected to subside within the year, as factors such as regular practice maintain and foster one's level of confidence in ICT use.</p> <p>In contrast the 2020 Be Connected used a value of 50% with the rationale: Confidence built as a result of the Be Connected program is not likely to reduce significantly; however, it is expected to reduce after a year if a regular practice is not maintained to update one's skills and level of confidence. The speed of technology change is also likely to erode the level of confidence without any further refresher training or regular practice.</p> <p>In the evaluation survey 50% of respondents said they had completed a previous course and 96% said they intended to do further courses in the future. Given this reinforcement of learning and ongoing practice, this evaluation adopted a drop-off rate of 50%.</p>
Increased knowledge of how to use digital technologies	40%	<p>The 2014 TSS SROI used 50% drop-off with rationale: In cases where trainees did not have the means to practice what they had learnt (whether time, motivation or access to ICTs), knowledge subsided quickly. In cases where trainees did practice, the impact of Tech Savvy Seniors can be argued to have subsided as the attributing effect of practice increases.</p> <p>The 2020 Be Connected also used 50% with rationale: Participants may lose interest and not practice enough, although they will still be able to be engaged online due to several factors, including the possible increase in Government online services.</p> <p>Given the high rate of intention to do further courses which suggests strong interest, and the ongoing need to connect as more services are moved online (particularly with the pandemic), this evaluation concludes that many program participants will continue to engage in practice and continue to gain knowledge, and that the % drop-off will be modest compared to earlier predictions.</p>
Increased use of digital technology to connect with family & friends	25%	<p>The 2014 TSS SROI assumed a 70% drop-off with the rationale: Integration of ICTs into one's lifestyle is considered to be proportional to the drop off of knowledge and confidence in using ICT devices and functions.</p> <p>The 2020 Be Connected SROI uses 25% drop-off for the connectedness outcome with the rationale: No significant drop-off is expected as participants are likely to be encouraged by family and friends to communicate through ICT devices. However, the fast change in technology may force them to drop off some of their learnings.</p> <p>The increased prevalence of social media since 2014 is likely to be a stronger factor in the continued uptake of digital. Also, the impact of the pandemic and the move of many services to online, suggests that the drop-off in use will be closer to the Be Connected estimate than the 2014 TSS estimate.</p>
Increased use of digital technology to support community involvement		
Increased use of digital technology to access information		
Increased use of digital technology to utilise online services		

Stage 5 – Calculating the SROI

The Social value of the TSS program is calculated by summing the benefits and the investments of the three primary outcomes.

Outcome	Social value generated at end of analysis period (2017 – 2020)
Increased confidence to use digital technologies	\$3,851,231
Increased knowledge of how to use digital technologies	\$640,094
Increased connectedness	\$3,968,012
Total	\$8,459,337

The benefits of the program are estimated to continue for three years beyond the program duration, however the value of the benefits reduces because of the Drop-off factors (discussed earlier). The estimated social value is discounted using a discount rate of 7.0% as recommended by NSW Treasury.¹³

The resultant discounted benefits are shown in the following table:

Outcome	Social value generated – at end of program (NPV)	Social value at 1 year beyond program period (NPV)	Social value at 2 years beyond program period (NPV)	Social value at 3 years beyond program period (NPV)	Total social value generated by program (2017-2020) + three years beyond analysis period
Social Value	\$8,459,337	\$5,285,681	\$3,425,248	\$2,293,669	
Net Present Value	\$7,905,923	\$4,616,718	\$2,796,023	\$1,749,829	\$17,068,493
Total Program Investment					\$2,570,477
SROI Ratio					\$6.64

A return of \$6.64 for each \$1 invested compares favourably with the 2014 evaluation which calculated a return of \$6.78 for each \$1 invested and the 'Be Connected' program which calculated a return of \$4.01 for each \$1 invested.¹⁴

¹³ NSW Government Guide to Cost-Benefit Analysis (TOO17-03), p45

¹⁴ McCosker, A., Tucker, J., Critchley, C., Hiruy, K., Walshe, J., Suchowerska, R., Barraket, J. (2020) Improving the digital inclusion of older Australians: The social impact of Be Connected. Swinburne University of Technology, Melbourne.

Sensitivity analysis

Sensitivity analysis is an important part of SROI calculation as it acknowledges the inherent subjectivity in determining the social return. A sensitivity test was carried out to assess the sensitivity of assumptions made in our analysis by altering those assumptions and comparing the effect on the final SROI ratio. The results are shown in the following table:

		Type of change	Change in estimate			Change in SROI	
			Baseline	Low	High	Low SROI	High SROI
Inputs	Baseline assumptions						
Senior citizens time & travel	Enrolments return travel by public transport to 3 sessions, @ NSW seniors daily max fare of \$2.50	Type of travel	\$298,830	\$149,415	\$714,204	5.70	7.0
DCJ governance time	0.4 FTE project officer	% FTE	\$119,621	\$105,266	\$129,190	6.6	6.7
Telstra website & program oversight	Estimate of website hosting cost + 0.3 FTE oversight	Percent	\$210,000	\$198,000	\$252,000	6.5	6.7
State Library NSW administration time	0.5 FTE project officer	% FTE	\$142,500	\$128,250	\$188,100	6.5	6.7
NSW Department of Education administration time	0.5 FTE project officer	Percent	\$149,526	\$134,573	\$197,374	6.5	6.7
Outcomes	Financial proxies						
Increased confidence to use digital technologies	Market value of the cost of equivalent training	Percent	\$255	\$204	\$306	6.1	7.1
Increased knowledge of how to use digital technologies	Cost of textbook to acquire similar knowledge	Percent	\$50	\$40	\$60	6.5	6.7
Increased use of ICT to connect with family & friends	Cost of counselling to address loneliness	Percent	\$347	\$277	\$415	6.4	6.9
Increased use of ICTs to support community involv't	The value of accessing information in terms of one's willingness to pay to use a telephone.	Percent	\$13	\$10.4	\$15.6	6.6	6.6
Increased use of ICTs to access information	The cost of travelling to a library or shopfront to access community information	No. trips	\$130	\$104	\$156	6.5	7
Increased use of ICTs to utilise online services	Cost savings in transferring in-person or telephone transactions to online transactions	Percent	\$490	\$392	\$588	6.3	7
Impacts	Type						
Increased confidence to use digital technologies	Deadweight	Percent	30%	10%	90%	4.5	7.4
	Attribution	Percent	5%	3%	90%	4.4	6.7
Increased knowledge of how to use digital technologies	Deadweight	Percent	30%	10%	90%	6.2	6.8
	Attribution	Percent	10%	3%	90%	6.2	6.7
Increased use of ICT to connect with family & friends	Deadweight	Percent	25%	10%	90%	5.4	6.9
	Attribution	Percent	25%	10%	90%	5.4	6.9
Increased use of ICTs to support community involv't	Deadweight	Percent	25%	10%	90%	6.6	6.6
	Attribution	Percent	25%	10%	90%	6.6	6.6
Increased use of ICTs to access information	Deadweight	Percent	25%	10%	90%	6.3	6.7
	Attribution	Percent	25%	10%	90%	6.3	6.7
Increased use of ICTs to utilise online services	Deadweight	Percent	10%	5%	90%	5	6.8
	Attribution	Percent	10%	3%	90%	5	6.8

In each case the SROI value remained greater than 1, which suggests that even under the alternative scenarios the social value exceeded the investment by a factor of 4.4 to 7.4, a robust result.