



Submission in response to the Australian Government Digital Economy Strategy Consultation

30 November 2017

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1. About us

The Australian Library and Information Association (ALIA) is the professional organisation for the Australian library and information services sector.

On behalf of our 5,000 personal and institutional members, we provide the national voice of the profession in the development, promotion and delivery of quality library and information services to the nation, through leadership, advocacy and mutual support. We represent school, public, academic, research, corporate, law, health, government, national, state and territory libraries and the professionals who work in them.

2. Introduction

We welcome this opportunity to respond to the Australian Government's Digital Economy Strategy Consultation. The library and information sector is an outstanding example of an industry that has successfully transformed itself to meet the challenges of the digital age.

We see this consultation process not only as an opportunity to promote the achievements of the library sector but also to raise awareness of the contribution libraries can make, now and into the future, to ensure that the digital economy is within everyone's reach.

This submission is supported by three ALIA reports (provided separately):

- 10 ways that libraries power Smart Cities, November 2016
- How public libraries contribute to the STEM agenda, May 2017
- Australian libraries: the digital economy within everyone's reach, November 2017

We also support the submissions made by Museums Galleries Australia and National and State Libraries Australasia.

3. Responses to questions

Question 1. How are advances in digital technology changing the way you work, your industry and your community?

Over the last 20 years, we have held fast to our mission of providing access to information for all Australians, but we have reinvented the way in which we deliver our services.

- We have moved from print to a combination of print and digital.
- We have invested in technology for public use.
- We have redefined the skills and competencies of our workforce.
- We have taken advantage of emerging technologies to improve operational efficiency.
- We have redesigned library buildings to accommodate technology spaces.
- We have established a strong online presence through websites and social media.
- We have introduced new services where digital has opened up exciting possibilities.

All these activities have been driven by the needs of our library users, everyone from the tech savvy entrepreneur, through the new generation of tech reliant students, to the local library user who wants to learn how to send an email. Our library users represent the full gamut of digital needs and abilities.

Question 2. What is your vision for an Australia that thrives in a digital economy? Where would you like to see Australia in five, 10 and 20 years' time?

Equity is a core value of libraries and our vision is of a future where everyone has the potential to benefit from a thriving digital economy; no one is left behind or marginalised because of their lack of access to technologies or their lack of IT skills.

At present, there is a significant digital divide, evidenced by the Australian Digital Inclusion Index¹. Over the next five, 10 and 20 years, we would like to see the gap narrowing across Australia, through improved connectivity, access, affordability and skills.

Question 3. What is the role of government in achieving that vision?

The majority of libraries rely on government support, whether school, health, academic or community focused. Australia's 1500 public libraries are run by territory and local governments. There is additional funding from state governments and some program and capital funding from federal government.

By investing in libraries, governments are already helping to achieve the vision of equity and supporting moves to close the digital divide – but there is a long road ahead.

As technology hubs, providing a trusted service, at the heart of local communities, public libraries are perfectly positioned to work with government to promote digital inclusion. We

¹ <https://digitalinclusionindex.org.au/>

are already partners in the Be Connected² initiative to support digital literacy for older Australians and we are working with the Office of the eSafety Commissioner to develop eSafe Spaces³.

In order for libraries to continue to support digital inclusion, we need our contribution to be recognised and the level of funding from governments to be sufficient for us to expand our services into these new areas.

Question 7. What opportunities do we have in standards development and regulation to enable digital entrepreneurship, innovation and trade?

In its *Intellectual Property Arrangements* report⁴, completed in 2017, the Productivity Commission identified libraries as one of the greatest potential beneficiaries of copyright reform in Australia. The Productivity Commission identified a number of areas of reform that would directly benefit libraries and their users, including:

- Extending the current copyright safe harbours to ensure that libraries receive the same protection as commercial ISPs when providing internet services for their clients.
- Limiting liability for those using orphan works.
- Protecting copyright exceptions from being overridden by contracts and technological protection measures (TPMs).
- Providing open access to government funded research within a year of its publication.
- Most importantly, introducing a modern, flexible and adaptable fair use provision.

With respect to this last recommendation, the introduction of a fair use exception, it would provide benefits not only to libraries, but also to our library users and the broader Australian population. Not only would it better enable us to digitise and provide online access to our collections, it would also allow the materials we provide to be used and built on by others in new and innovative ways.

In response to the Productivity Commission's recommendations the government has committed to a round of further consultations, including ongoing processes around safe harbours and copyright regulations, and consultations planned for 2018 on limitations and exceptions, orphan works and contractual override.

The Australian Libraries Copyright Committee⁵ represents the interests of Australian libraries and it has urged the government to take advantage of these processes to continue the good work of the Copyright Amendment (Disability Access and Other Measures) Act to further broaden and simplify the current library and archive exceptions in the Copyright Act, and prioritise the implementation of the Productivity Commission recommendations for the benefit of libraries and our library users.

² <https://beconnected.esafety.gov.au/>

³ <https://www.esafety.gov.au/esafety-information/esafe-spaces>

⁴ <https://www.pc.gov.au/inquiries/completed/intellectual-property/report>

⁵ <http://libcopyright.org.au/>

Question 9. What opportunities do we have to build trust and community confidence through resilience to cyber threats, online safety and privacy?

It is impossible to eradicate misuse of the internet, but it is possible to educate people so they can navigate the digital world in relative safety, becoming confident in identifying threats and protecting their personal data.

Since 2012, more than 1000 libraries have participated in the eSmart Libraries⁶ program, an initiative of the Alannah and Madeline Foundation, with \$8 million in funding from the Telstra Foundation, supported by ALIA's Australian Public Library Alliance. The eSmart Libraries program complements eSmart Schools and introduces the concepts of online safety to thousands of Australians of all ages, every year.

Public libraries in New South Wales, Queensland and South Australia are running Telstra Tech Savvy Seniors⁷ sessions, which target older Australians, and Be Connected is the new government program, also for older Australians, which will be rolled out in libraries from 2018.

ALIA promotes ACORN resources to libraries⁸. Libraries can play an important role in raising awareness of cybercrime and how to report it, because our users are vulnerable. Free Wi-Fi spots are an attractive target for cybercriminals seeking to steal personal information such as passwords and banking details. Young people are prolific users of social networks where cybercriminals can bully or harass; older Australians can often be vulnerable due to a lack of experience online; and those between 25 to 40 years are the most active in the digital economy making them most likely to be affected by cybercrime. All of these groups turn to libraries for advice and support.

Their trusted status means that public libraries are ideally placed to assist with government communications and encourage participation. Learning through libraries is an informal, community-based approach, which reaches a wide audience, including those who are often described as 'hard to reach'.

In 2016, in advance of the federal election, the Australian Electoral Commission (AEC) approached ALIA to organise voter information sessions in public libraries in areas of high informal voting. Libraries at 63 locations ran 115 voter information sessions in 10 community languages. The program was judged a success, not only in terms of the sessions themselves, but also in terms of promoting the importance of exercising one's democratic right to vote through library websites, posters and social media.

The Australian Bureau of Statistics (ABS) approached LINC Tasmania to make the 2016 Census more accessible to everyone, including those with low literacy or barriers to online access. LINC Tasmania was uniquely positioned to help, based on its wide geographical

⁶ <https://www.esmart.org.au/esmart-libraries/what-is-esmart-libraries/>

⁷ <https://www.telstra.com.au/tech-savvy-seniors>

⁸ <https://www.alia.org.au/ideas-campaigns-and-events-your-library/help-stamp-out-cybercrime-acorn>

spread, safe and welcoming physical spaces, extensive network of free public PCs and Wi-Fi and existing role in supporting clients to be online.

The extensive network of LINCs (libraries) were places where Tasmanians could find help accessing the Census online or in paper form, or for additional support including literacy. The partnership demonstrated LINC Tasmania's role in promoting social inclusion and enabling and supporting digital citizenship in an increasingly digital world, and generated higher quality Census data for Tasmania.

Question 16. What efforts are you or your organisation making to respond to digital transformation? Why?

Digital transformation has been driven by several factors: the need for libraries to remain relevant, the need to meet increased user expectations, and the operational benefits that accrue from new technologies.

Libraries exist to provide access to information – and the world's knowledge is increasingly delivered in a digital format. Academic libraries led the way with the introduction of electronic journals in the 1970s. Since then, eresources have become a staple for libraries, alongside print and AV formats. The introduction of digital content has been accompanied by digital devices, digitally-enabled spaces, new IT programs and services, and a digitally skilled library and information workforce.

Over the five years from 2010-2011 to 2014-2015, public library visits increased from 111.6 million to 114 million, while loans declined from 182.8 million to 166.8 million – a clear indication that more people were visiting libraries for reasons other than book borrowing⁹.

The transformation of our own business practices – for example through advances in library management systems and the introduction of self check-out – has led to improved efficiencies and the freeing up of staff from mechanical tasks. This has given staff more time to engage with library users, greatly increasing the 'value add' of qualified library and information professionals.

Question 20. What opportunities do we have to equip Australians with the skills they need for the digital economy, today's jobs, and jobs of the future?

Public libraries have been called "the street corner university" and lifelong learning continues to be an important feature of the library service. For those who are unwilling or unable to engage in formal education, informal learning at the library is a safe entry point. Libraries offer one-on-one support as well as classes, helping people who have been out of the workforce find a way to update their skills.

⁹ http://www.nsla.org.au/sites/www.nsla.org.au/files/publications/NSLA.Aust-Pub-Lib-Stats_2014-15_2.pdf

Question 21. What opportunities do we have to bridge the ‘digital divide’ and make the most of the benefits that digital technologies present for social inclusion?

There are 1500 public libraries around Australia, providing 1500 points of connection with people who might otherwise be excluded. Libraries run home outreach programs and provide special services for people with print disabilities.

New technologies are increasing the effectiveness of these programs. For example, tablets can be preloaded with a wide selection of ebooks, increasing the choice of reading materials for people who are housebound. These devices also increase the range of books available to people living with print disabilities.

Question 22. What opportunities do we have to ensure digital technology has a positive impact on the cultural practices and social relationships of Australians?

Libraries provide digital access to their collections and these collections are aggregated through the National Library of Australia's Trove platform¹⁰.

Launched in 2009, Trove is now a gateway to more than 550 million items, including digitised newspapers, magazines, photographs, journals, letters, manuscripts and websites. For people who are interested in family history, researchers, historians, and digital creators, Trove is a rich source of information that is available 24/7.

More than a search engine, Trove brings together content from the National Library, Australia's State and Territory libraries and hundreds of cultural institutions and research organisations around Australia, and attracts over 70,000 users on a daily basis.

Since 2015, ALIA has been a lead agency in GLAM Peak, a collaborative body comprising the peak bodies for galleries, libraries, archives, museums and historical societies. The federal government has supported the GLAM Peak Digital Access to Collections project¹¹ through two Catalyst grants and we will be seeking further support for stage three, to engage with the public and raise awareness of the online opportunities to explore Australia's arts and cultural heritage.

4. In summary

Libraries provide an outstanding example of an industry which has embraced digital transformation. We have maximised the benefits for library management and we have taken on a new role as centres for digital inclusion.

¹⁰ <http://trove.nla.gov.au/>

¹¹ <http://www.digitalcollections.org.au/>



Australian Library and
Information Association

AUSTRALIAN LIBRARIES

THE DIGITAL ECONOMY WITHIN EVERYONE'S REACH





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Australian libraries: the digital economy within everyone's reach

Publisher The Australian Library and Information Association, Canberra ACT, November 2017

www.alia.org.au

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INTRODUCTION

In order to be a leader in the global knowledge economy, Australia needs skilled workers and a strong research sector. Government services delivered online are faster and cheaper. More people online opens up new markets and enables businesses to respond quickly with innovative new products and services. Universal access helps to address equity issues for regional and remote Australians.

In addition, digital transformation generates valuable data which can support improved health outcomes, help target financial support to those who need it most, and achieve other benefits for communities.

The advantages of a digitally enabled population are clear but if we are to make the most of this new paradigm, Australians must have access to the internet and the skills needed to create and locate accurate information. They must feel confident and safe online, and they must have a reason to be engaged with digital services.

Libraries see the need and the opportunity. We have extended our remit beyond traditional literacy (reading and writing) into information and digital literacies. We have introduced public access computers and other digital devices into public libraries. We provide access to the internet for everyone, and we are working hard to build people's confidence, with cybersafety education. We also give people positive reasons to become more digitally connected.

While this report is essentially about public libraries and the digital economy, it is also important to note the vital part that school libraries play in leading children and young people on their journey of digital discovery. State and Territory libraries play a vital role in preserving and promoting Australia's unique history. In universities, libraries have been the test bed for digital innovation in support of students, academics and researchers, and in industry, government, health and law, special libraries have embraced digital resources to deliver decision-ready information straight to their clients' desks.



THE LIBRARY AND INFORMATION SECTOR



5,000 members of the Australian Library and Information Association



13,650 locations in metropolitan, regional and remote Australia



27,500 workers in libraries and information services



12.9 million users in communities, schools, universities, TAFEs, government departments, research agencies, hospitals, NGOs, law firms, banks, media channels, technology companies and other knowledge-based enterprises across Australia



\$2.8 billion annual expenditure is the estimated size of the library and information market in Australia

DIGITAL INCLUSION: ACCESS FOR ALL THROUGH THE LIBRARY

“

Libraries are arguably the single most important grass-roots community space with capacity to provide ALL members of their community access to current knowledge and information. They can provide internet-enabled computers and tablets, collaborative working spaces, themed activities and programs targeting different audiences and acquire new resources to add to their borrowing collections.

Adam Selinger
Children's Discovery Museum

”



Libraries provide national digital infrastructure

According to the 2014–2015 *Australian public libraries statistical report*¹, there are 1,630 public libraries, including mobile libraries, covering every state and territory and attracting more than 114 million visits each year. Almost all have public access internet terminals – more than 13,000 in total – and the 2013 ALIA *Internet Access in Public Libraries Survey*² found that there was free Wi-Fi in more than 70% of locations. Twenty-seven of the 30 first round Digital Hubs were located in public libraries and they have proved to be a sound investment, continuing even after federal government funding for the program ceased.

Locating the digital divide

ALIA has been pleased to support the development of the Telstra-funded *Australian Digital Inclusion Index*³, which measures the level of digital inclusion across Australia. The index not only identifies the three million Australians who are not currently online, and also provides the geographic location so that libraries are able to target services where they are most needed.

Supporting egovernment services

Digital transformation is leading to more government services being delivered exclusively online, which means more people are turning to libraries for computer access and to library staff for help navigating online forms. At a conservative estimate, public libraries are already handling more than 10 million information enquiries each year and this is likely to increase substantially.

¹ http://www.nsla.org.au/sites/www.nsla.org.au/files/publications/NSLA.Aust-Pub-Lib-Stats_2014-15_2.pdf

² <https://www.alia.org.au/sites/default/files/publishing/ALIA%20Internet%20Access%20in%20Public%20Libraries%20Survey%202013%20FINALweb.pdf>

³ <http://digitalinclusionindex.org.au/the-index-report/report/>

Libraries ACT

Libraries ACT hosted the ACT Digital Hub through the Federal Government program promoting the NBN and offering digital literacy skills development. During the two year program, approximately 33,000 ACT residents were exposed to NBN applications and functionality, and 1,270 one-on-one sessions and 506 group sessions were presented. Opportunities included showcasing a virtual classroom experience for the Adult Migrant English Program and there were other, individual successes.

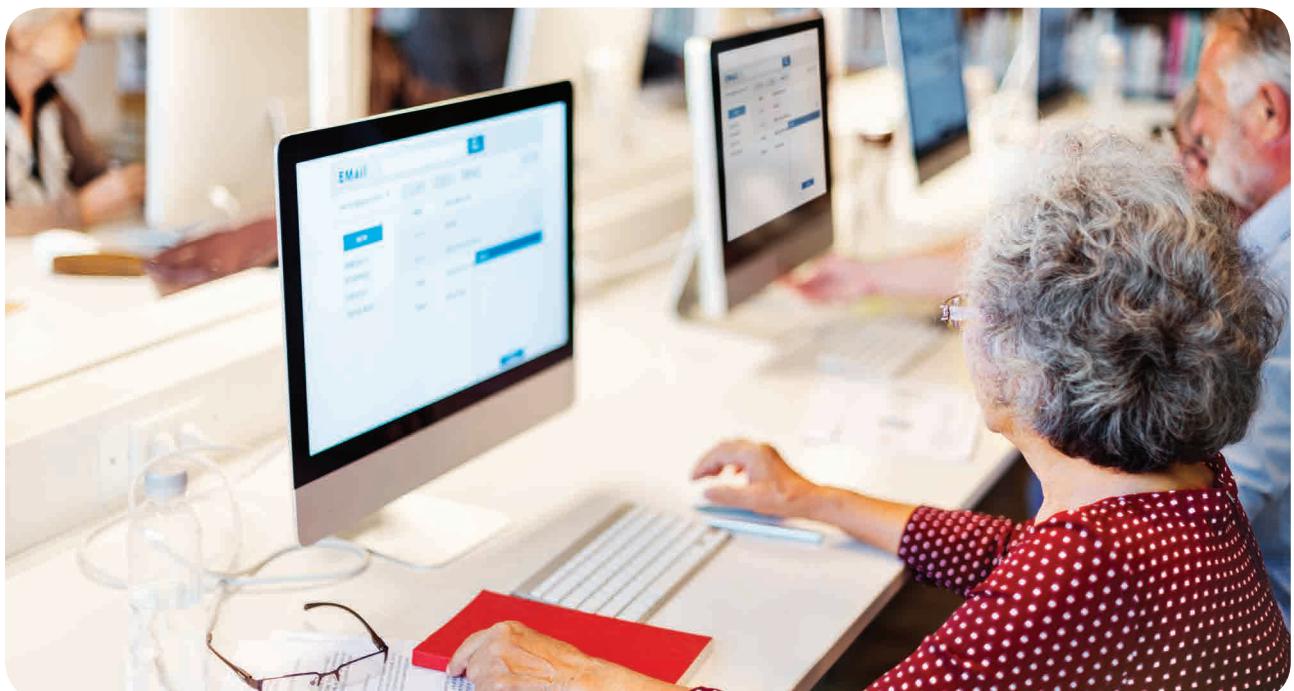
When Anne, a 50-year-old with significant digital literacy issues, first came for help, she did not know how to turn on the iPhone her grandson had given her. Now she can navigate her Windows computer, and has learned to “Google it”.

Dave came for help with problems getting Microsoft Outlook to do what he wanted. He couldn't figure out how to send the same email to all members of his bowls club. With the help of a trainer, he was guided through the process of creating a group with numerous contacts in it. He was then taught about using CC and BCC to send an email to specific members of his group. He was grateful for the help and moved on to learning to save documents he creates into folders on his computer.

Janice, a 58-year-old who never read more than two books, came for help with an ereader she had been given by a family member and a desire to be more literate in print as well as digital media. She attended regular one-on-one sessions, working her way through setting up an email address, connecting her ereader to her laptop and downloading library books as well as free books. She learnt enough about the internet and how it works to get connected to the NBN and talk to her service provider about changing her network name and password and having access to her online account so she could make sure it was secure.

Elsa came seeking help with understanding her new laptop. She had recently moved to the Canberra region to take care of her elderly mother, which took up a lot of her time. She needed the laptop to streamline her schedule, seek work, and remain in contact with friends, family, and life back home. It was also going to be used by her sister. Elsa now feels confident and competent with her device. She has an understanding of basic cybersafety and uses online banking, she has updated her resume and is applying for jobs online.

Digital literacy sessions and technology previously offered through the ACT Digital Hub have since been integrated into the library's services across the city. These include a program called Deadly Digital which is a digital skills program for Indigenous children.



Encouraging people to explore digital opportunities

Public and school libraries are increasingly providing maker spaces, coding and robotics classes for all ages, from early years to seniors.

Port Macquarie-Hastings Library

Thanks to Library Development Grants, Port Macquarie-Hastings Library has been able to introduce a professional grade recording studio and a Tech Room, showcasing the latest in gadgets and technology.

The Imaginarium is a fully equipped recording studio, available free to all library members. It contains a high-end iMac, Mbox Pro, a suite of professional grade software programs, amplifiers, video camera, green screen, as well as instruments and equipment available on request. Port Macquarie-Hastings has a burgeoning arts and music scene and The Imaginarium addresses an increasing need in the local area. The space has been booked week after week since its launch in July 2015. Users include musicians, dancers, actors, video editors, podcasters and hypnotherapists.

Launched in 2016, The Tech Room contains a range of equipment including 3D printers, 3Doodlers, Spheros, MakeyMakeys, Raspberry Pi's, a drone, as well as virtual reality equipment like Oculus Rift, HTC Vive, and Samsung GearVR. While 3D printers were not completely new to libraries most of the other equipment was a first.

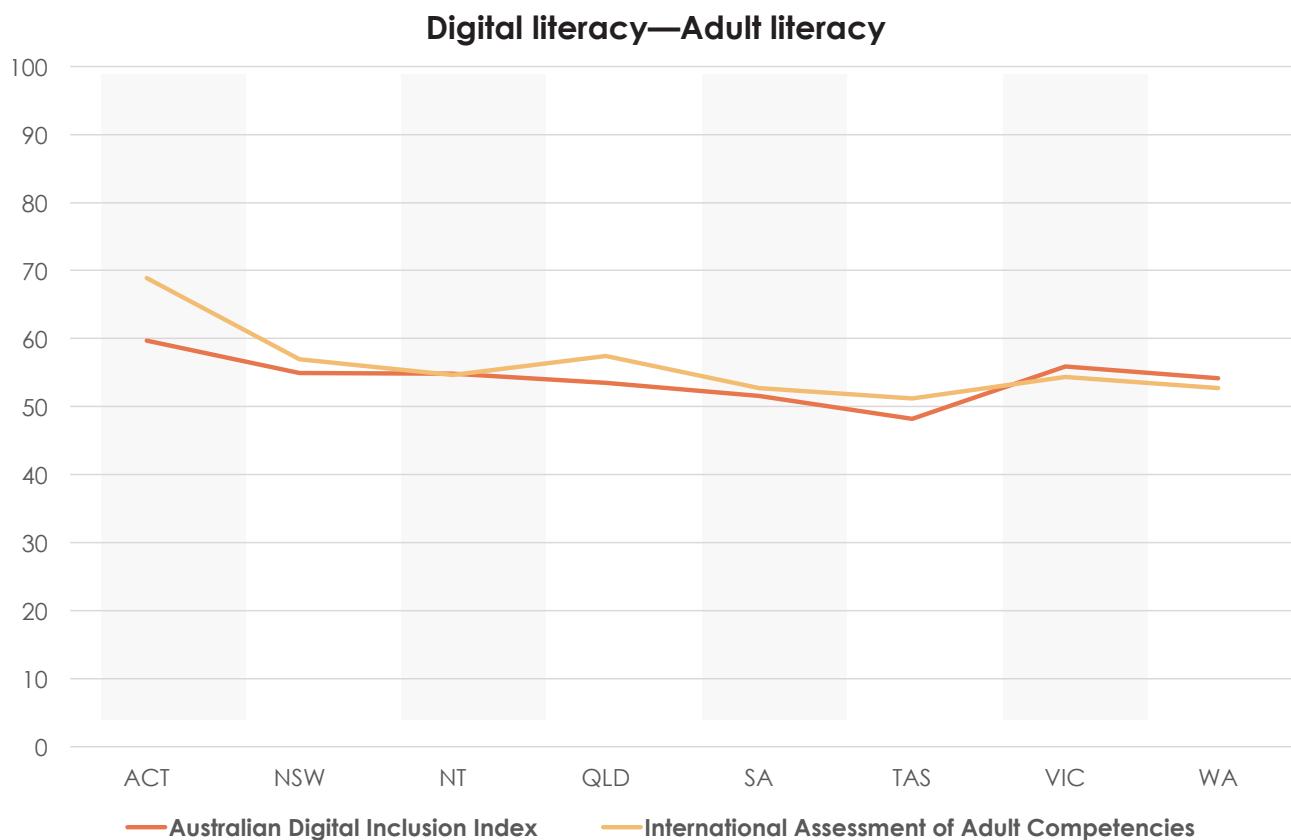
Most of the equipment is transportable. Brendan McDonald, Technical Services Librarian, Port Macquarie-Hastings Library Service says, "We have visited remote schools where, in addition to giving the kids hands on access, we have demonstrated just how tricky drone flying is. We visited a nursing home where a 95 year old was brought to tears by VR – and not in a bad way.

"The team has held 'weird techie stuff' open days and VRfternoons, and targeted specific groups such as U3A, Probus clubs and homeschooling groups. We have also showcased the various technologies at the Regional Art Gallery and numerous community events throughout the local government area."



DIGITAL AND INFORMATION LITERACIES

The findings of the *Australian Digital Inclusion Index*⁴ demonstrate the disparities between regional Australia and metro areas; between people in high and low socioeconomic localities. Unsurprisingly, when the findings of the Australian Digital Inclusion Index and levels of adult literacy as judged by the International Assessment of Adult Competencies are overlaid, the results are remarkably similar. Reading and writing skills are essential precursors to digital literacy.



Ebooks and ereading

Libraries have long been in the business of reading and while ebooks have been present in libraries since the 1990s, the last five years have seen a major increase in the number of electronic titles and audio books now in circulation.

The latest available figures showed more than 1.1 million ebooks available through public libraries⁵, although ebook loans represented only 2% of all the items loaned as readers of all ages continue to enjoy reading print books.

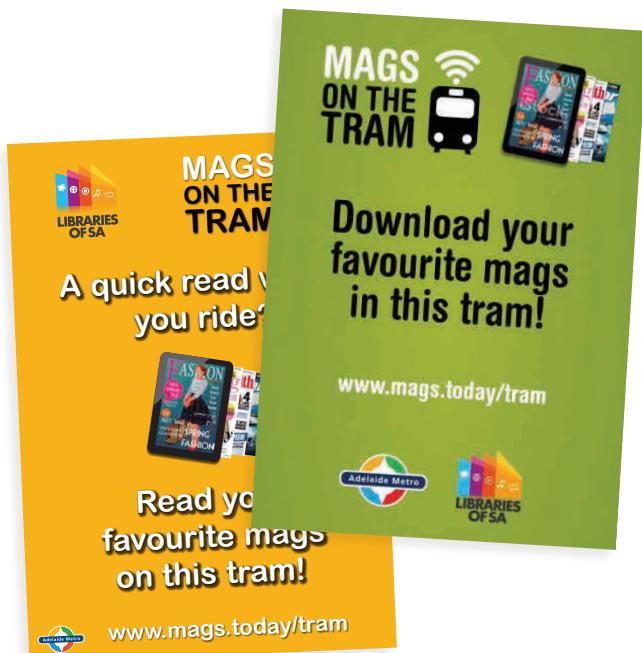
⁴ <http://digitalinclusionindex.org.au/the-index-report/report/>

⁵ http://www.nsla.org.au/sites/www.nsla.org.au/files/publications/NSLA.Aust-Pub-Lib-Stats_2014-15_2.pdf

Public Library Services, South Australia

To promote SA Public Libraries' emagazine collection, in 2016 Public Library Services (PLS) South Australia partnered with the Department of Planning, Transport and Infrastructure, RB Digital and Adelaide Metro to provide a selection of free digital magazines to commuters on Adelaide's metropolitan tram service, utilising free Wi-Fi on trams.

Users were presented with a web page with a selection of eight popular magazines including *Woman's Weekly*, *House and Garden*, *Men's Fitness* and *Wheels*. A day later the user was sent a single, personalised email that promoted the free magazine service offered by the SA Public Library Network, and encouraged the user to become a public library member.



Tech training

More than two thirds of public libraries offer internet training sessions. These range from the internet for beginners through to advanced research skills. While some courses are delivered in group sessions, many are one-on-one.

Following the success of Telstra's Tech Savvy Seniors and Everyone Connected programs in libraries, from 2017 there is a new government-funded initiative, Be Connected, to improve the digital literacy of seniors. Libraries are positioned to benefit from the \$20 million in grants available for local community programs.



Tech Savvy Seniors information session, Jeta Gardens

Logan City Council Libraries

The Tech Savvy Seniors Queensland program in Logan has provided fun and free technology sessions for seniors in their local library and also through sessions in aged care facilities. The program focuses training on cybersafety, social media, using electronic tablets and smart phones, email and the internet. Participants gain confidence in using digital technology to socialise, access government services and for personal business needs.

Jeta Gardens is located in Bethania, one of the suburbs identified as have a significant proportion of people aged 65 years and over. Most residents come from a Chinese background.

The Outreach Librarian worked with the Lifestyle Coordinator of Jeta Gardens Retirement Village to enable two Tech Savvy Seniors Queensland training sessions to be hosted at Jeta Gardens, for 21 participants. These two sessions were in English, but were advertised in the retirement village newsletter in both English and traditional Chinese.

A third visit was negotiated by the Outreach Librarian to the Beenleigh Library, and was presented as a bus tour. Many residents were keen family historians, and were very excited that not only were family history workshops offered at the library, but that the Local Heritage Specialist could tailor sessions. As a result, the Lifestyle Coordinator of Jeta Gardens Retirement Village and the Outreach Librarian have now collaborated with the Local Heritage Specialist to hold a special event at Beenleigh Library on Library Lovers' Day in 2018, which falls during Chinese New Year. This event, Celebrating Queensland's Chinese heritage workshop, will demonstrate how to trace Chinese ancestors who came to Australia in the 19th century.

October Outing—10月郊遊樂

Library Visit and Tech Savvy Seniors Session at Beenleigh Library 參觀圖書館並在館內學習智能手機應用技巧



Date & Time
時間及日期

18th October 2017, Wednesday and departing at 9 a.m.
10月日，星期三，上午9時準時出發。

Pick up point
上車地點

Bus will be parking on the road side at Jeta Apt.
園巴將停泊在公寓大門入口處之路旁。

Library Address

Crete Street, Beenleigh, Qld. 4207

09.30 a.m.

Presentation about the library services including the home library service.
專人帶領參觀圖書館

10.00 a.m.—10.20 a.m.

Morning tea
飲早茶

10.25 a.m.—11.45 a.m.

Tech Savvy Seniors Session: Smartphones-intermediate
(Run by Doug Panic)
中級智能手機課程

Buffet Lunch
自助午餐

At Greenbank RSL and lunch to be paid on your own
自費午餐

Jeta Bus Fare
園巴收費

\$5.00 per person.
每位 \$5.00 元

Booking
報名定座

Please book your seat at The Opal Reception.
請盡快到澳寶大樓，住戶服務中心接待處報名。



Technology Classes for Smart Phone & Tablet 智能手机和平板電腦應用技能班

We are delighted that Logan City Council is providing the following free classes to our Retirement Village residents and details are as follows:

We非常榮幸，洛根市府提供以下免費課程給本園退休住戶，詳情如下：

Introduction to tablets 平板電腦介紹

This hands-on sessions introduces you to tablets. Learn how to navigate the web using a tablet device, its features, applications and much more! **Some iPads will be provided.**

此乃入門之實用課程，向你介紹平板電腦的使用，學習如何上網及其應用方法。
可提供電子手帳。

Introduction to smart-phones: 智能電話介紹

Learn how to navigate your way around a smart-phone with a touch-screen. You will learn to how to make and receive calls, add and look up contacts and change the volume of the phone. You will also learn about the applications, what they are and how to download and use them. **BYO smart-phones.**

學習手機導航及如何接聽電話，你更學會尋找你的聯絡朋友或調較音量。你還可學到下載訊息和應用。請自備智能電話上課。

Two Days Class Schedule 共兩天的課程時間表

Date/Time/Venue 日期/時間及地點

23/8 and 30th August 2017, two Wednesdays at 09.00 a.m.—10.30 a.m. in MPR, Opal
8月23日和8月30日，星期三，共兩天，上午9時至10時半在澳寶樓多功能廳上課。

Registration 報名登記處

Please register at the Opal Reception on or before 18th August 2017.
請在8月18日或之前到澳寶樓接待處報名登記。



Computer rooms in remote communities

Over the last seven years the partnership between Northern Territory Library and the Central Australian Youth Link-Up Service (CAYLUS) has delivered internet connectivity and computer rooms into many remote Australian Aboriginal communities.

To date, CAYLUS has supported the development of computer rooms at Mt Alan, Laramba, Mt Liebig, Kintore, Harts Range, Engawala, Lake Nash, Areyonga, Amoonguna, Ikuntji, Docker River, Tjuwanpa, Ntaria, Titjikala and Papunya. They have also developed computer rooms at three town camp learning centres in Alice Springs: Trucking Yards, Hidden Valley and Karnte.

These community spaces have enabled skills development, literacy and numeracy, access to internet banking and government services and self-directed learning for all ages – and not least, a fun way for kids to engage with the wider world. As more government and other services transition to online access only, connectivity and access to computers is becoming increasingly essential to those living in remote Aboriginal communities.



Digital literacy and school libraries

Digital technology has become an integral part of learning, and school libraries build on children's skills by providing a space where the online world and advanced technologies can be explored in a safe and encouraging environment.

iCentre, Iona Presentation College

The motto of the iCentre at Iona Presentation College in Western Australia is *Information, Inspiration, Innovation*. Leonie McIlvenny, co-Head of the iCentre explained, "We use the four pillars for education in the 21st century (*Learning to Know; Learning to Do; Learning to Live Together; and Learning to Be*) to help us achieve our aim of being at the forefront of new thinking about the way students learn, how information and digital literacies can be effectively integrated into the school curriculum, and how students can be inspired to be lifelong learners."

Whole school key initiatives developed by the teacher librarians and iCentre staff include *The Inspired Learning at Iona* and *ROAD at Iona* websites, the *Integrated Information Literacy Program* and the *Digital Passport* program.

The *Inspired Learning at Iona* website is a rich repository of carefully selected and created resources to support the curriculum needs of all learning areas in the school. It provides a wide range of resources including resources about wellness (relaxation, nutrition, stress management), thinking skills (Habits of Mind, Memory Training, Learning Styles), and study skills. The whole school community has access to these resources anywhere, anytime.

The *Integrated Information Literacy Program* is designed to standardise the way students develop information literacy skills. Graphic Organisers and Web 2.0 tools are included in the planning matrix to create a transparent map which provides an overview of the skills and knowledge in information and digital literacy students are expected to acquire at the various year levels.

The *ROAD at Iona* website supports the iCentre's reading program and is run in collaboration with the English department. The collaborative and social aspects of technology are modelled through the class reading blogs where students share their ideas and insights about the books they are reading, while the *IonaPC* Twitter feed allows students to follow their favourite authors. As part of the *ROAD* program all students create blogs and websites to share their ideas and insights about what they are reading.

The iCentre's *My Digital Passport* program utilises new open badge technologies to capture information about the achievement of a range of hard-to-measure ICT. The passport is introduced in Year 7 and captures students' ICT skills development within the digital. The badge program is now being broadened to include maths skills and other 'hard to capture' skills and competencies. Students can capture their badges in a 'digital backpack' that showcases their learning from year to year.



SAFE NEUTRAL PLACES

People turn to library staff as trusted professionals for help to navigate the internet. It is not enough to learn how to use a computer, novices also need help to avoid the pitfalls of malware, cyberbullying and scams.

eSmart Libraries

The eSmart Libraries program, run by the Alannah and Madeline Foundation, with \$8million funding from the Telstra Foundation, launched in 2012 and by October 2017 had been rolled out across 1,074 of Australia's 1,500 public libraries.

Esperance Public Library

Esperance is an eSmart Library. Kathryn Gray, Library Technician – Digital Services, explains how it has benefited her community.

Esperance is a small and isolated town in Western Australia, 714 km away from Perth, 393 km away from the next major town. This limits the options available for the community when it comes to in-person technological assistance. Even if assistance is available over the phone, the customers with the poorest digital literacy are unable to use it and require one-on-one face to face assistance.

Some customers find the rate of technological change alarming. Just altering the user interface design of a website that they were previously familiar with is a major barrier to their continued use of technology, and one that occurs frequently. Customers sometimes arrive at the library quite distressed because their technology seems to have a mind of its own and they have no idea where to start or what to do. Customers are increasingly relying on the library to access government services online. Some do not have or use computers so they need intensive help to accomplish basic tasks.

Tech Help sessions at the Esperance Public Library, offered since 2013, meet this demand for digital support and eSmart accreditation was a natural extension of the service. Esperance became eSmart in April 2017.

As an eSmart library, Esperance is recognised as a safe and highly accessible place for people to get help with technology. There is nowhere else in the community that provides this service and the library serves the entire range of socioeconomic and age groups, making libraries ideal for delivery of such important information and assistance. Libraries are trusted information providers and have been for a very long time. Staff members know how to communicate in a way that customers can understand and the service and information provided is free.

The level of digital illiteracy in our society is highly underestimated by those who work with, and around technology every day. It's not until you work with the public as we do in public libraries that you see the level of need in our society. People with low digital literacy are particularly susceptible to cybercrime and this is a cause for concern. When a customer sits down at a computer in the Esperance Public Library the first link they will see on the Cyber Safety home page is 'Report a Cyber Crime', linking to the Australian Cybercrime Online Reporting Network (ACORN) and we provide one-on-one guidance to help customers avoid scams.

Time and money are always short, and making sure staff skills are up-to-date in a rapidly changing digital environment is a personal challenge for all of us, but the community benefits are far greater than the barriers we have to overcome. eSmart Libraries are exactly what Australia needs.

eSafe Spaces

ALIA's Australian Public Library Alliance has supported the Office of the eSafety Commissioner's eSafe Spaces initiative with pilot schemes in the ACT in 2016 and Tasmania in 2017.

LINC Tasmania

The Kingborough U3A group learned about technology on Android and Apple devices at the Kingston LINC (Learning Information Network Centre). A key need of the group was for some extra training on esafety. LINC's digital volunteers included a four series session on Staying Safe Online which covered passwords, scams, phishing phone calls, anti-virus and protection software and back up procedures. This program was based on information provided by the Stay Smart Online federal government website. The group found the information very useful, and it helped build their confidence in spotting scams or fake emails, and knowing what steps they can take to protect themselves and report this behaviour.

A 65 year old female client from a non-English speaking background came for assistance at the Huon LINC to understand how her iPad worked. She was concerned about connecting to Wi-Fi and how she could use government services online in a confidential way. A LINC volunteer showed her how to work through the Stay Smart Online resources and how to access MyGov and Centrelink services. She was also assisted with switching between languages and safely using applications on her iPad.

Ulverstone Library recently had an older farmer come into the LINC with a brand new iPad still in its box. Tom, the Customer Service Officer sat with him and discovered that Bill had never used the internet or had email. Tom began to show Bill what the iPad was capable of. Bill was so amazed when Tom asked Siri what the weather would be for the day and Siri replied with 'there will be no rain today' that Bill jumped out of his seat. Bill has gone on to use the iPad for numerous purposes and has installed an internet connection at home.

A mother contacted Devonport LINC through its Facebook page. Her young son had set up an account without her knowledge and she was keen to understand the cybersafety issues. LINC staff explained how to check different apps and put securities in place to protect children using apps. The outcome was a better educated family with resources online that they felt confident to tap into themselves.



SUPPORTING INNOVATION IN INDUSTRY AND GOVERNMENT

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Libraries in higher education have seen enormous change in the digital era. The sector is now delivering education to students all over the world, and we are part of the third largest export industry in Australia – a powerhouse within the Australian economy.

Roxanne Missingham

University Librarian, Australian National University

”



Australian National University Library

At the Australian National University (ANU), digital transformation has been a feature of the library. Students and researchers are empowered through having access to scholarly resources wherever they are, 24 hours a day, and the usage of eresources has grown exponentially.

The creation of digital scholarly portals has increased the visibility of ANU research outputs. Through ANU Press, over 750 published works have been made available freely to all Australians – with over 1 million downloads in the first half of 2017. More than 80,000 research works have been made accessible through the open research repository. Students are now read around the world, with over 250,000 downloads of theses last year.

With over 2.6 million downloads of Australian research through ANU Press and Open research service, research is accessible to industry in a way not envisaged even a decade ago. The over 5 and a half million downloads by students and academics is evidence that learning and research can now truly be achieved online.

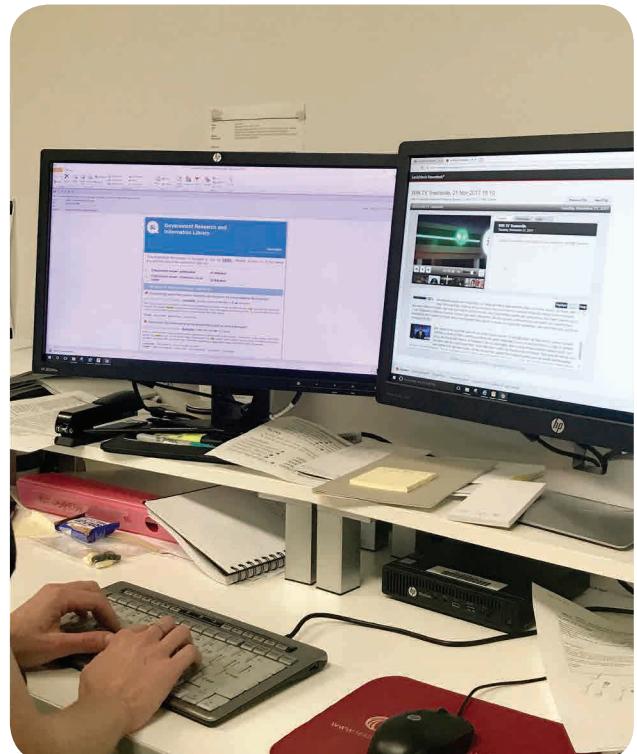
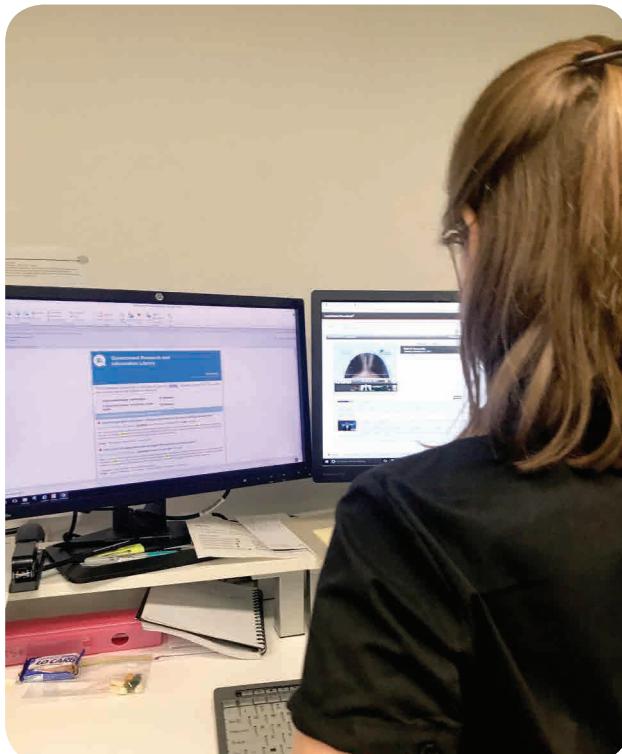
Growing students' and academics' digital capabilities has been an important focus, as these skills are required in industry, research and other sectors.

GRAIL, State Library of Queensland

GRAIL (Government Research and Information Library) is a unit of the State Library of Queensland (SLQ), providing service to central agencies across the Queensland government. GRAIL is e-preferred with very little print added, ebook access is patron driven and older material scanned on demand. GRAIL has brought significant benefits to its member departments and continually works to demonstrate value. Examples include providing return on investment equivalent dollar value on resources, broadening the SLQ offer of Press Reader hotspots and providing access to Lynda.com to all member departments.

Access to media alerts is essential to government. GRAIL staff worked extensively with an industry partner to enhance their new media platform to be more responsive to government needs and to provide greater seamless access to online and broadcast media with tailored daily alerts. GRAIL staff blog articles and reports from multiple research, government and think-tank sites which are disseminated via Twitter and to their government officer subscribers via monthly research updates

To broaden access to information, GRAIL actively engages with procurement areas on discussions for whole of government subscriptions.



LINC Tasmania, Australian Bureau of Statistics

In 2016, the Australian Bureau of Statistics (ABS) approached LINC Tasmania to make the 2016 Census more accessible to everyone, including those with low literacy or barriers to online access. LINC Tasmania was uniquely positioned to help, based on its wide geographical spread, safe and welcoming physical spaces, extensive network of free public PCs and Wi-Fi and existing role in supporting clients to be online.

The extensive network of LINCs (libraries) were places where Tasmanians could find help accessing the Census online or in paper form, or for additional support including literacy. The partnership demonstrated LINC Tasmania's role in promoting social inclusion and enabling and supporting digital citizenship in an increasingly digital world, and generated higher quality Census data for Tasmania.

Cove Civic Centre, Hallett Cove

The Cove Civic Centre is home to a library, an enterprise hub and community spaces, and provides the community with a facility that is flexible and can support a diverse range of activities. The Centre provides meeting spaces for people to connect for learning and recreational pursuits, and supports local businesses with their endeavours.

Since opening in July 2015, the Library and Business Growth and Investment (Economic Development) teams continue to work closely together to deliver the community vision of a liveable, connected, engaged, prosperous and innovative city that enhances people's digital literacy.

To enable this, the teams have recently developed the SEED program (Space for Exploring Everything Digital). SEED allows people to explore and have fun with emerging technologies while offering learning opportunities to improve digital literacy and support innovation in the community. With programs such as Streaming for beginners, Getting the most from your elibrary, DIY holidays, Exploring your iPad, Coding for adults and young people, having proven popular and are always booked out. Delivered initially from the Cove Civic Centre, the SEED program has also popped up at Tonsley – South Australia's newest innovation district within the City of Marion and is a focus area of the State Government, Renewal SA.

The Cove Civic Centre is part of the City of Marion's commitment to providing quality spaces for the benefit of its residents, workers and visitors.



OVERCOMING BARRIERS

One of the areas with the greatest potential to improve the regulatory environment for Australia's libraries and further advance digital innovation is copyright reform. Australia's libraries are undertaking a broad range of activities that seek to take advantage of the digital revolution to better serve users, partners, and Australian cultural growth.

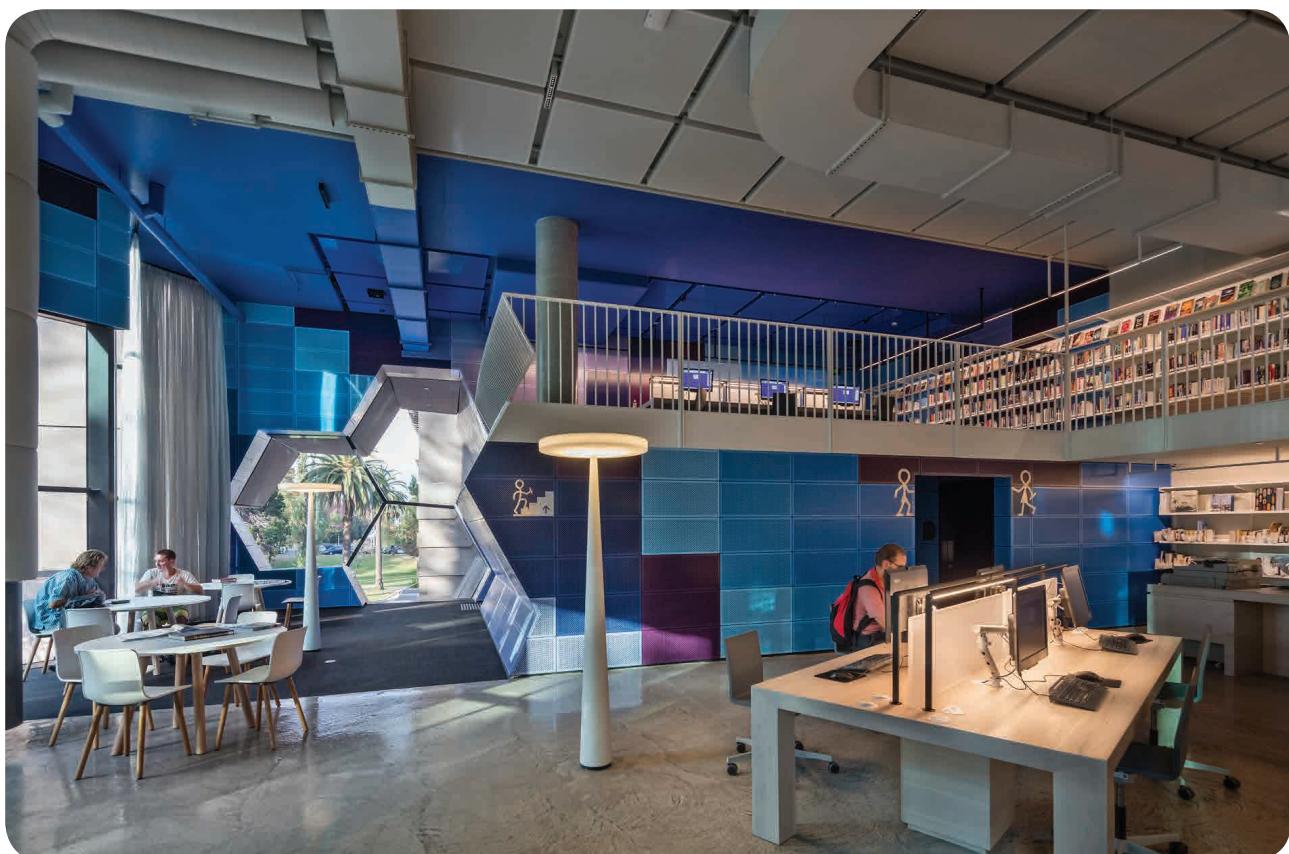
Australia's restrictive and confusing copyright laws are hampering our ability to take advantage of the digital revolution. Copyright currently presents a significant barrier to Australian libraries in:

- Digitising and providing online access to our collections.
- Taking full advantage of orphan works in our collections ie copyright material for which a copyright owner cannot be identified.
- Providing collaborative technological facilities and projects, such as digital hubs and innovation spaces.
- Providing material to clients for uses such as text and data mining, data visualisation, and even family history research.

Even daily activities, such as supplying material to offsite requests, often require libraries to jump through significant bureaucratic hurdles from a copyright basis, increasing time and cost burdens.

In 2017 the government took a good first step to address some of the limitations placed on libraries by copyright law through its support of the Copyright Amendment (Disability Access) Act. This Act simplified and broadened a number of the exceptions available to libraries in the Copyright Act, relating to important activities such as preservation, research, administration, and providing access to our collections for those with a disability.

A number of these changes related to removing technology or material specific limitations, and complex clearance steps that frequently cause confusion. However, there are still many areas in which improvement could occur.



In its *Intellectual Property Arrangements* report, completed in 2017, the Productivity Commission identified libraries as one of the greatest potential beneficiaries of copyright reform in Australia. The Productivity Commission identified a number of areas of reform that would directly benefit libraries and their users, including:

- Extending the current copyright safe harbours to ensure that libraries receive the same protection as commercial ISPs when providing internet services for their clients.
- Limiting liability for those using orphan works.
- Protecting copyright exceptions from being overridden by contracts and technological protection measures (TPMs).
- Providing open access to government funded research within a year of its publication.
- Most importantly, introducing a modern, flexible and adaptable fair use provision.

With respect to this last recommendation, the introduction of a fair use exception, it would provide benefits not only to libraries, but also to our library users and the broader Australian population. Not only would it better enable us to digitise and provide online access to our collections, it would also allow the materials we provide to be used and built on by others in new and innovative ways.

In response to the Productivity Commission's recommendations the government has committed to a round of further consultations, including ongoing processes around safe harbours and copyright regulations, and consultations planned for 2018 on limitations and exceptions, orphan works and contractual override.

The Australian Libraries Copyright Committee represents the interests of Australian libraries and it has urged the government to take advantage of these processes to continue the good work of the Copyright Amendment (Disability Access and Other Measures) Act to further broaden and simplify the current library and archive exceptions in the Copyright Act, and prioritise the implementation of the Productivity Commission recommendations for the benefit of libraries and our library users.



4,000 YEARS OF INNOVATION

Libraries have been in a constant state of transformation over more than 4,000 years. From collections of clay tablets (Ebla, Syria, 2400 BC), through manuscripts, to the printing press (Gutenberg Bible, 1455), from there to the lending libraries of the 1800s, and the mass production of affordable books (Penguin paperbacks 1936), libraries have moved with the times, promoting "the free flow of information and ideas through open access to recorded knowledge, information, and creative works".⁶

Transformation is nothing new for libraries and we have taken digital transformation in our stride, overcoming the barriers and taking advantage of the exciting opportunities to provide our communities with even greater access to information on a global scale. We are no longer limited by the parameters of the library collection. Through the internet and digital resources, we can provide our library users with a previously unimaginable level of access to the world's knowledge.

How libraries have experienced digital transformation

Academic libraries were the first to enter the digital age, breaking new ground with electronic journals back in the 1970s. By the 1980s, across the library sector, card catalogues were in decline and libraries were taking advantage of open public access catalogues and new management software to make back office functions more efficient and improve the collection's accessibility.

Libraries have always been early adopters of technology. We were among the first to develop active websites and in the 1990s were providing users with public access computers, online databases, ebooks, audio books, CDs and other digital formats.

Libraries have also always been good at maximising the opportunities for online collaboration. For example Picture Australia, introduced in 2000, was an initiative of the National Library of Australia, bringing together digitised images from cultural collections around the nation, to the benefit of library users everywhere.

The early 2000s saw an exponential leap in the impact of digital technologies on the library sector. Radio Frequency ID tags in print books allowed for self check out to become widespread. Social media brought new ways to communicate with library users, and internet training courses became part of the core service.

More recently, we have adopted Wi-Fi, BYOD (bring your own device), print on demand books, ebook platforms, media labs, 3D printers, maker spaces, coding and robotics classes, digitised collections and we are now exploring the value of community spaces without books, which still encapsulate the ethos of a library.

Trove, National Library of Australia

Launched in 2009, the National Library of Australia's Trove platform is now a gateway to more than 550 million items, including digitised newspapers, magazines, photographs, journals, letters, manuscripts and websites. For people who are interested in family history, researchers, historians, and digital creators, Trove is a rich source of information that is available 24/7.

More than a search engine, Trove brings together content from the National Library, Australia's State and Territory libraries and hundreds of cultural institutions and research organisations around Australia, and attracts over 70,000 users on a daily basis.

⁶ Core value of the Australian Library and Information Association
<https://www.alia.org.au/about-alia/policies-standards-and-guidelines/alia-core-values-statement>

State Library Victoria

Over the past 25 years, State Library Victoria (SLV) has made major shifts in line with digital technology – from the first digitised collection items on disk to full services and collections online. The Library's first digitising project was the creation of Pictoria in 1990 – an analogue video disk containing 104,000 images from the pictures collection. In 1994 the Pictoria disk, which previously could only be read on one specific machine, was converted into a digital format that was made available via a server to three onsite computer terminals.

Then, with the revolution of the internet, in 1996 the Pictoria images were transferred to an online catalogue, which allowed computer browser access to both the images and their more detailed catalogue records. The library was well on its way to becoming a virtual library, creating vast online collections that allowed multiple concurrent usage, onsite and offsite, 24/7.

In 2006, State Library Victoria launched slv21 – a three-year project to move the Library forward into the digital future by expanding the Library's services, providing learning opportunities, and opening new ways to access the Library's collections.

To achieve this, a number of new technologies were introduced including Primo (a federated search interface), Relais (a direct delivery service to fulfil customer orders for digitised items), and a digital object management system (originally Digitool, now being replaced by Rosetta in 2018). All of these systems needed to be configured with the Voyager library management system, which required four separate catalogues to be merged into one – a massive undertaking.

Today SLV provides millions of users with immediate access to more than two million digitised files. These files represent more than 700,000 collection items encompassing pictures, newspapers, journals, manuscripts, rare books, maps, ephemera, realia and oral history.

One of the Library's most successful digital campaigns is the recent #CreateArtHistory international design competition, in partnership with RedBubble. Artists were invited to design an artwork using a curated collection of digitised Library images. The competition drew 1,900 entries from around the world – 300% more than previous RedBubble competitions – and generated some of the highest rates of web page traffic and online engagement for the library.

Over the next three years the Library is implementing Vision 2020, a redevelopment of the Library's spaces and services that will include a digital transformation strategy. The new Conversation Quarter will extend the virtual experience of the library through a program of live-streamed events across a two-way, high-speed worldwide network. Start Space, a new centre of entrepreneurship, will support the start-up and small business sector with resources, training and digital technology. It will be an early incubator and launch pad for new businesses, making a critical contribution to Victoria's burgeoning and future innovation economies.



CONCLUSION

In the rapidly changing digital environment, libraries are among the best-equipped and most experienced organisations to take advantage of innovation and adapt to new challenges. Utilising new technologies and enabling the community to access services quickly and easily is a fundamental library function.

Libraries build and foster people's information and digital literacies. We create a safe and encouraging environment, provide a trusted source of digital advice and in many cases are the only internet and digital access for many members of our communities. Our collections provide a comprehensive source of unique knowledge and information, available to re-invent, re-use and explore online.

Libraries should be at the core of planning how best to negotiate the digital economy, and ensuring that every member of the community has access to services and can take advantage of the opportunities it presents. We have been essential in providing the training, access and information required to do this for decades, and will continue to do so far into the future.

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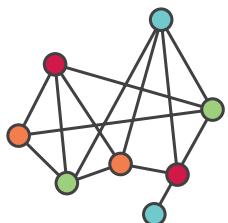


Australian Library and
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For more information

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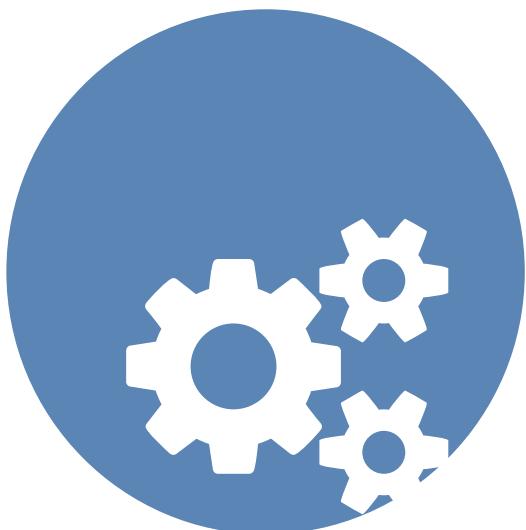
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How public libraries contribute to

THE STEM AGENDA

2017



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ACKNOWLEDGEMENTS

The STEAM into Sydney conference was built around the mid-term meeting of the IFLA Standing Committee on Public Libraries, and was organised by Marian Morgan-Bindon, Manager of City of Gold Coast Libraries, Queensland, and Jan Richards, Manager of Central West Libraries, New South Wales.

The event was sponsored by the State Library of NSW, the NSW Public Library Association, the Australian Library and Information Association (ALIA) and library systems supplier Civica.

This report has been produced by the ALIA Australian Public Library Alliance as an advocacy document to show what can be achieved through local government investment and library staff skills and creativity.



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How public libraries contribute to the STEM agenda 2017

Publisher The Australian Library and Information Association, Canberra ACT, May 2017

www.alia.org.au

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INTRODUCTION

Governments across the world are agreed that in order for countries to thrive in today's knowledge-based economy, their workforces need a strong STEAM (Science, Technology, Engineering, Arts and Mathematics) skills base.

It is vitally important that people engage with the technical subjects, gain confidence and build a solid understanding so that they can take advantage of new technologies. At the same time, people need to develop the right side of their brain – the side that deals with creativity and imagination – so that they can not only use new technologies, but also be the innovators who create the next wave of inventions.

Public libraries are uniquely placed as centres of informal learning for all ages, at the heart of their communities. They have embraced the opportunities to bring STEAM initiatives to all, from the very young through to those who are post-retirement.

BACKGROUND

In March 2017, more than 100 leaders from public libraries across Australia, Asia, Eastern and Western Europe and the Americas, gathered at the State Library of New South Wales (NSW) for *STEAM into Sydney*.

STEAM into Sydney celebrated the innovative ways that public libraries are supporting the science, technology, engineering, arts and mathematics agenda. Presentations were ambitious, inspirational and demonstrated the kind of forward-thinking that has made public libraries such successful centres for lifelong learning in their communities. There were excellent examples of initiatives in Australia, as well as from around the world.

“

Libraries are arguably the single most important grass-roots community space with capacity to provide ALL members of their community access to current knowledge and information. They can provide Internet-enabled computers and tablets, collaborative working spaces, themed activities and programs targeting different audiences and acquire new resources to add to their borrowing collections.

Adam Selinger, Children's Discovery Museum

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THE DISCOVERY CLUB IN SYDNEY LIBRARIES

The *Little Bang Discovery Club* is a partnership between the Children's Discovery Museum and public libraries in 25 locations around Sydney. It targets pre-schoolers and early primary school aged children and their families, aiming to develop knowledge and skills that inspire early scientific exploration, discovery and learning – the hallmarks of critical thinking and innovation.

The program consists of four one-hour sessions of in-library, hands-on activities, with question and answer time, and a take-home Discovery Box, which is loaned to each family for the duration of the program. The boxes are intended to enhance child, family and community access to age-appropriate, quality scientific equipment. An additional resource for older children (aged 8-12) includes loanable STEM kits with items such as a Galilean telescope, microscope, human torso model, mineral collection, percussion instruments, mysterious magnet tubes and bug collection and identification tools. Relevant books and DVDs are added to the box from the library collection, or specially purchased.

The weekly sessions are based on a sequence of skills, such as collecting and classifying, measuring, and experimenting. A final session is about communication and sharing, focusing on a 'science fair' and a final 'graduation' celebration.

The program is unique in that it requires parents and carers to accompany their children to each session, not as 'baby-sitters' but as equals, co-learning, exploring, asking questions and discovering together.

The *Little Bang Discovery Club* is designed to be run by and within libraries, adding STEM programs and resources to the communities they serve while fitting in with their existing staffing and venue structures. The program is sustainable because it works in harmony with a library's methods of operation and utilises existing resources and networks.

Presenter Adam Selinger, co-founder and Creative Director, Children's Discovery Museum



Adults and children are equally involved participants in the Little Bang Discovery Club.
Photo: Miranda Soliman



Little Bang provides each family with specially designed investigations to try at home between sessions.
Photo: Adam Selinger



Little Bang provides each family with specially designed investigations to try at home between sessions.
Photo: Adam Selinger

CODE CLUB AT LEICHARDT LIBRARY

Code Club started in 2014 and is a worldwide not-for-profit organisation based in the UK. The organisation provides network connections to over 1500 [Code Clubs that assist 50,000 Australian children¹](#) to learn to code.

The library staff launched Code Club at Leichhardt Library in NSW, in November 2015. Sessions run for four weeks during the school term and are designed for a junior 'tween' audience. The curriculum uses Scratch, a free online programming website developed by MIT <https://scratch.mit.edu/> and Trinket, a free online programming website that allows you to create and edit HTML and CSS code as well as using Python programming language <https://trinket.io/>.

In addition to meeting STEAM skill goals, there have been further benefits. Attendees make new friends, they develop more confidence within themselves and their skills, and they will often seek out opportunities to assist those around them. Some of the attendees who have attended the sessions have helped teach their classmates at school how to use Scratch and they have participated in coding challenges such as 'The hour of Code'. Their enthusiasm has not ended at the conclusion of the programme.

Presenter Selina Breckenridge, Digital Librarian, Inner West Libraries, Leichhardt



¹ Code Club Australia 2017, Code Club viewed 21 February, 2017, <<https://codeclubau.org/get-involved/>>

PORT MACQUARIE-HASTINGS IMAGINARIUM AND TECH ROOM

Thanks to Library Development Grants, Port Macquarie-Hastings Library has been able to introduce a professional grade recording studio and a Tech Room, showcasing the latest in gadgets and technology.

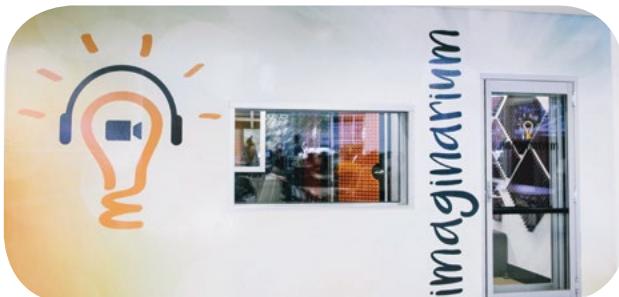
The Imaginarium is a fully equipped recording studio, available free to all library members. It contains a high-end iMac, Mbox Pro, a suite of professional grade software programs, amplifiers, video camera, green screen, as well as instruments and equipment available on request. Port Macquarie-Hastings has a burgeoning arts and music scene and The Imaginarium addresses an increasing need in the local area. The space has been booked week after week since its launch in July 2015. Users include musicians, dancers, actors, video editors, podcasters and hypnotherapists.

Launched in 2016, The Tech Room contains a range of equipment including 3D printers, 3Doodlers, Spheros, MakeyMakeys, Raspberry Pi's, a drone, as well as virtual reality equipment like Oculus Rift, HTC Vive, and Samsung GearVR. While 3D printers were not completely new to libraries most of the other equipment was a first.

Most of the equipment is transportable. "We have visited remote schools where, in addition to giving the kids hands on access, we have demonstrated just how tricky drone flying is. We visited a nursing home where a 95 year old was brought to tears by VR – and not in a bad way."

The team has held 'weird techie stuff' open days and VRfternoons, and targeted specific groups such as U3A, Probus clubs and homeschooling groups. We have also showcased the various technologies at the Regional Art Gallery and numerous community events throughout the LGA.

Presenter Brendan McDonald, Technical Services Librarian, Port Macquarie-Hastings Library Service



Photos: Brendan McDonald, Port Macquarie-Hastings Library Service

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We are currently looking at acquiring Google's Daydream View VR and hopefully also Microsoft's Hololens in the near future. Certainly one of the ongoing challenges will be keeping abreast of emerging technologies.

**Brendan McDonald, Technical Services Librarian,
Port Macquarie-Hastings Library Service**

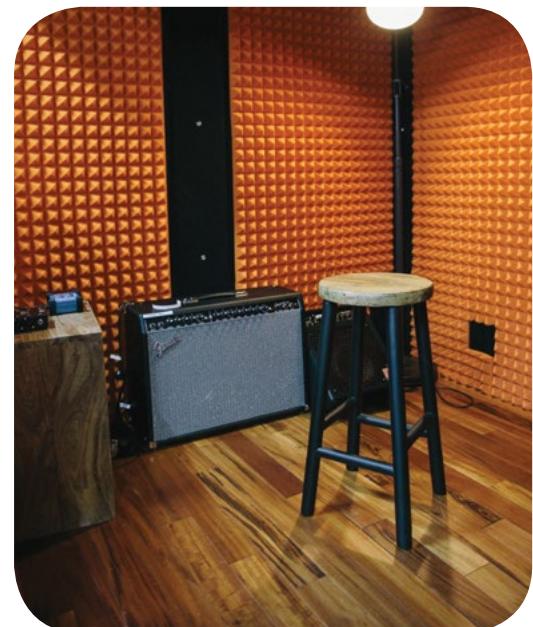
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For librarians: you don't need to have a science background to implement STEM programming. All you need is passion and a willingness to try new things.

**Miranda Soliman,
Randwick City Library**

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Photos: Brendan McDonald, Port Macquarie-Hastings Library Service

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Public libraries have the unique opportunity to engage youth in fun, exciting, and educational STEM programs; further develop the skills and knowledge base of their librarians; partner and collaborate within the community; and increase their support in the community, all while providing necessary informal education opportunities to support STEM fields.

Miranda Soliman, Randwick City Library

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CITY OF PERTH KNOWLEDGE WEEK

Knowledge Week was the brainchild of the City of Perth Library, Knowledge Society and their partners. It was a celebration of ideas, thinking and learning in Perth's new heart, Cathedral Square.

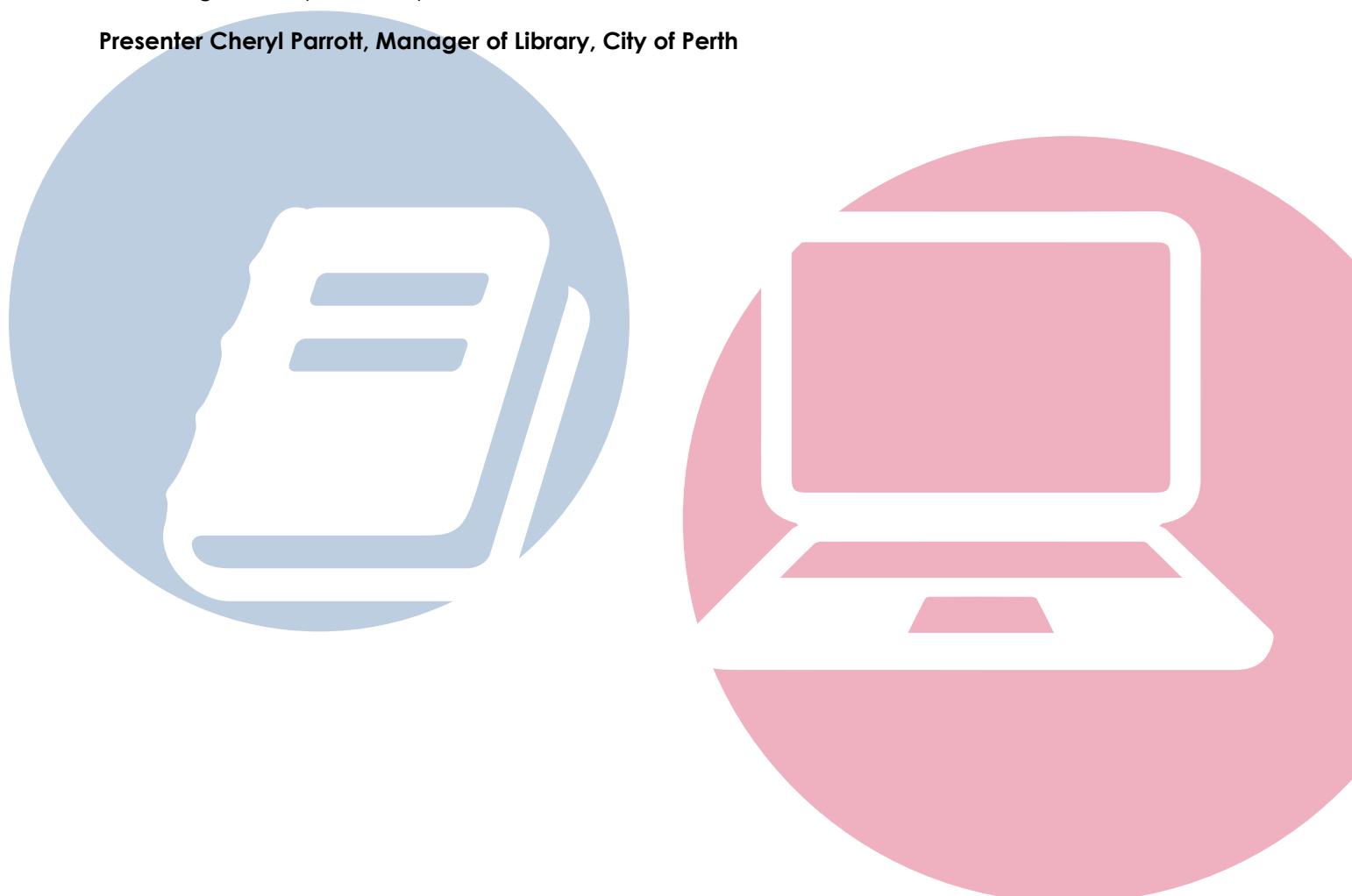
The week started with a major literary event with actor and author, Richard Roxburgh, who spoke on the importance of libraries, literacy and how reading instils a sense of creativity and wonder in our children.

A discussion forum followed with three of Perth's leading lights in innovation and technology, the Executive General Manager of People, Change and Innovation at the RAC, Managing Director of Rio Tinto's Iron Ore's Planning Integration and Assets and Director of Games and Interactive Programs at FTI. These women, role models in their own right, are driving creativity, change and innovation in their organisations and using powerful technology, like big data, to create new economic value in Western Australia.

All sessions during the week focused on specific aspects of STEAM, from how big science and the Square Kilometre Array is 'finding needles in a cosmic haystack' to running pop-up sessions on CoderDojos and virtual and augmented reality gaming.

Coding classes for primary and secondary students, public engagement workshops with the McCusker Foundation for Citizenship, talks in partnership with the International Centre for Radio Astronomy Research and other projects such as the WA Chief Scientist speaking about health research and personalised medicine are all activities in the library which have resulted from the Knowledge Week partnership.

Presenter Cheryl Parrott, Manager of Library, City of Perth



STEAM IN PRACTICE AT CITY OF RYDE

Investment in a new library and refurbished branches provided the opportunity for City of Ryde to explore STEAM opportunities. Library staff began with an idea about creating a space which supported children's science and technology literacy and decided on a large mural with a steam punk theme with two large embedded touchscreens; a collection of science kits available for loan; two large museum style microscopes; a curiosity cabinet with illuminated boxes including an x-ray viewer, 12 drawers containing a range of objects and with four iPads mounted with educational games. Other features were a storytelling chair, dodo-shaped children's chairs and a range of distorting mirrors for bay ends.

Since the work has been completed, the programs team and staff have provided nearly 20 science based activities at West Ryde including a Little Bang Discovery Club and a series of workshops on topics such as the physics of toys, LEGO building, light, earthquakes, water, batteries, food, dinosaurs, magnets and bubbles.

Presenters Jill Webb, Manager, Library Services and Ken Klippel, Senior Coordinator, Library Operations, Ryde Library Services

Photos: Jill Webb, Ryde Library Services



THE LEARNING SPACE, RHODES, CITY OF CANADA BAY

In 2017, City of Canada Bay Libraries opened The Learning Space, a library without print books. It is located in The Connection, City of Canada Bay's community and cultural precinct in Rhodes.

The main space has desks, tables, and occasional furniture to facilitate work, study, gatherings, and programs. A regular photocopier, printer, scanner; a high resolution A0 plotter and scanner, and a 3D printer, as well as public access computers are available to the public.

There are two modest studio spaces, one of which is setup with digital creative gear for photography, video, music, and benches to support maker activities such as electronics, robotics, and 3D printing. It also has a digital classroom, equipped with an interactive whiteboard, which also hosts seminars, talks, and in busy periods, quiet study.

The foyer of the building doubles as the digital gallery. The large scale video wall, two projector screens, and high end sound system allow exhibition of a curated program ranging from international video art, provided through a partnership with dLux media arts, to community created content.

The facility has been a big hit with the community. The school holiday program was well subscribed, the after-school robot club has been a sell-out, and over 70 families attend baby rhyme time.

For families with English as a second language, there are storytimes in Korean and Chinese, and Tech Savvy Seniors sessions in Mandarin and collections in many languages and formats are available online.

Presenter Joy Suliman, The Learning Space Coordinator, City of Canada Bay Libraries



Photo: Ann-Marie Calilhanna and Joy Suliman, The Learning Space, Rhodes, City of Canada Bay

TECH EVENTS IN GEELONG

In 2015, Geelong Regional Library Corporation opened the award winning Geelong Library & Heritage Centre (GLHC). It is not only a flagship central library but also a centre of digital technology for the community.

At the [2016 Pivot Summit](#)², Patti Manolis, Geelong Regional Libraries CEO, teamed with Justine Hyde, Director of Library Services and Experience at the State Library Victoria, to tell business entrepreneurs and innovators about the vital role of public libraries in our digital future. They explained that libraries provide a range of hardware, software and emerging technologies from hardwired to tablets to raspberry pi to robotics, to 3D printing to open source computing to eKnow-how sessions and skilled, professional staff. The day after Pivot Summit, GLHC played a central part in the Pivot Connect community festival, with the Geelong Art Gallery, the Courthouse Youth Arts Centre and the City of Greater Geelong City Hall also providing venues for digital activities and experiences.

GLHC was also a logical choice for the Geelong Digital Learning Network school maker fair. The network is a collaborative association between 32 schools from the Geelong, Bellarine and Surf Coast areas. The major events space of the library was transformed into a convention space providing a “circuit training” rotation for students to experience technologies including programmable robots, circuitry sets, 3D printers, virtual reality and interactive classroom computing before turning their attention to developing pitches to use that technology to inspire and entertain. With over a dozen stalls, staffed by schools, vendors, the Gordon (a technical and further education institution) and the library, the experience came together with around 120 students exploring emerging technology and its relationship with the STEaM curriculum.

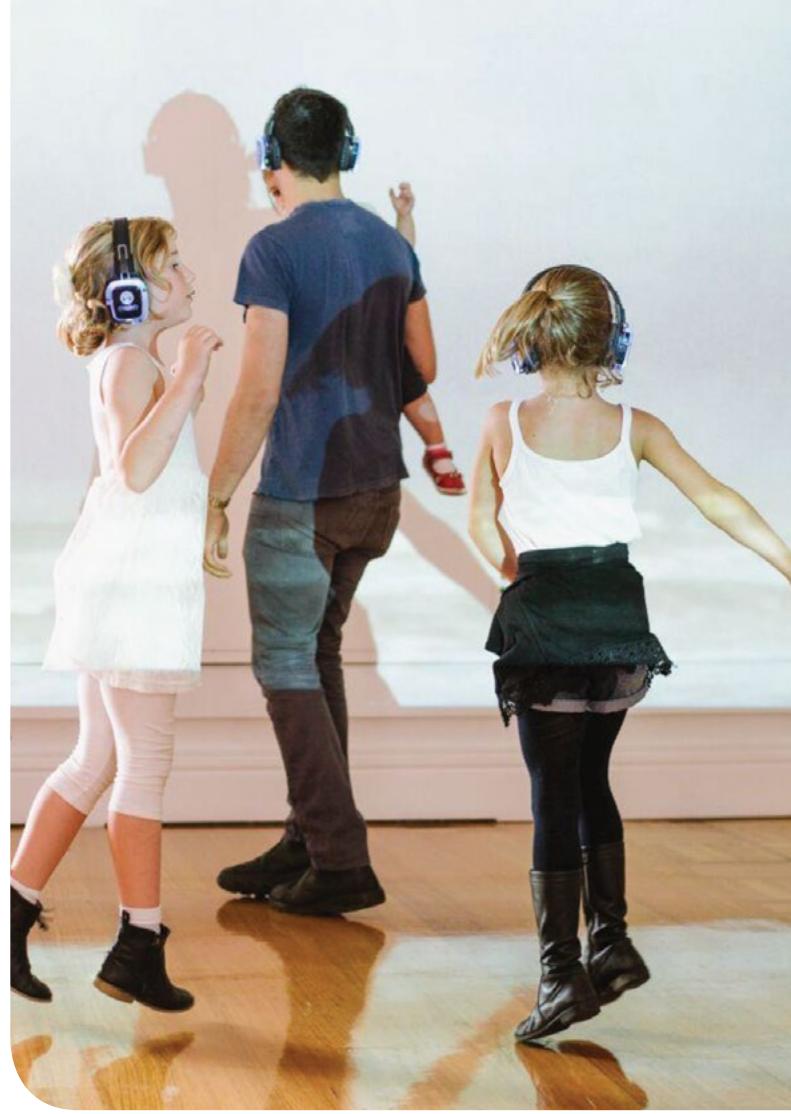
eKnow-how and STEaM programs delivered across the Geelong library network address the digital divide and encourage digital inclusion by fostering trans-literacy skills and better preparing our users for success in lifelong learning, education and work by providing them with access to technology that might otherwise be unavailable to them. The Information Resource Team delivers Tech Savvy Seniors programs from beginner's basics through to learning about MOOCs, 3D scanning and printing, Green Screen Technology, VR experiences, creative images and digital storytelling. A Raspberry Pi Meet-up is facilitated once a month and run by members of the group.

The introduction of a robotics program using LEGO MINDSTORMS® by Geelong's Children's and Youth Services Team has been highly successful. The course is run over a 10-week period and in addition to allowing participants to build a robot of their choice, it also introduces them to programming using the LEGO MINDSTORMS® software. An important aspect of this program is the progression from LEGO MINDSTORMS® to Advanced LEGO MINDSTORMS® including a trip to Deakin University's Centre for Advanced Design and Engineering Training (CADET)³.

**Presenter Cathryn Ferencz, Executive Manager, Collection and Technologies Access,
Geelong Regional Library Corporation**

² Pivot Summit is an event that brings together Australian and international thought leaders to share insights on the future of digital technology. Its aim is to be Australia's answer to the American South by Southwest Conferences and Festivals held in Austin, Texas. <http://pivotsummit.com.au>.

³ Deakin University's Centre for Advanced Design and Engineering Training (CADET), <http://www.deakin.edu.au/engineering/cadet>.



Photos: Cathryn Ferencz, Geelong Regional Library Corporation



CUMBERLAND LIBRARIES TEACH PROGRAMMING AND CODING

Cumberland Council Libraries provides STEM program for young children that will encourage their understanding of the concepts of science and engineering.

Cumberland Libraries trialled using Arduino as a new innovative approach to engage school-aged students (10 to 18 years) through short, 1.5 hour sessions during the January 2017 school holidays. The basic tools used are Arduino microcontrollers, solderless breadboards, light emitting diodes, resistors and laptops to run a visual programming language. Participants are introduced to basic electrical concepts and learn to build simple circuits and program them using different parameters. A programming method was selected over coding due to it being more user-friendly. Programming is based upon graphical blocks that already exists, with the user needing to drag and drop them in the correct sequence to get the program to work. Coding is more complex and requires strict punctuation and syntax.

In addition, the children were introduced to a SPRK+ (Schools, Parents, Robots, Kids). The SPRK+ is a robotic waterproof ball programmed by a range of apps. It can reach speeds of more than two metres per second. This robot can be used to introduce students to coding and robotics, as it allows the user to control the robot in real time. SPRK has its own C-based language called OVAL. It allows the user to trace a path to direct the robot with an app using their finger tips or can provide block-based programming through the use of Lightning Lab.

As a group, the participants recreated the maze, altered the obstacles and took turns in driving the Sphero through the maze. The smartphone was under the student's control and they were simply enjoying this extra activity as part of a learning curve without realising that they were using mathematical skills in manoeuvring the ball and stopping it before it hit an object. This is intended for students in a class whereby they can learn basic mathematical skills such as speed, distance and time or starting at a particular point and ending at another point by calculating and working out the speed over a particular defined distance, for example, by measuring the time taken to travel between the points.

Presenter David Samuel currently based at Auburn library and provides system support and other library services within the Cumberland Libraries.

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Children are naturally creative and the public library provides an ideal setting and atmosphere to nurture STEM engagement activities suitable for all ages, with varying capabilities.

David Samuel, Cumberland Libraries

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Photo: David Samuel, Cumberland Libraries

CREATIVE PARTICIPATION AND PRACTICE, CITY OF SYDNEY LIBRARY

In response to the increased demand for affordable and accessible creative participation opportunities, City of Sydney Library partnered with Pine Street Creative Arts Centre to deliver a series of workshops during 2016.

The trial series offered introductory workshops in drawing, printmaking and ceramics. Guided by a professional tutor, participants were taken through a series of short exercises to build their confidence in and understanding of the art form and build skills that they may continue to grow.

Each workshop was an accessible two hours in length and at \$15 per person was an affordable option.

During the year six workshops were run, with a capacity of 20 people, each workshop was fully booked with an average for 80% attendees.

New for 2017 is the City of Sydney Youth Curators program. This program brings together creative young people aged between 15–18 to curate and participate in a series of collaborative meetups and events called The Outlandish Library in 2017. Young people explore diverse creative practice: from writers to dancers, set designers to singers, animators to actors, coders to painters, filmmakers to musicians and all the many hybrid fusions in-between. In each series, the young curators will have the opportunity to select a resident artist who will attend each session and help shape the meetup activities.

Presenter Ellen Lowrey, Manager Programs and Learning, City of Sydney Library



Photos: Ellen Lowrey, City of Sydney Library

THE EDGE – CASE STUDIES IN PRACTICAL STEAM

SLQ The Edge has spent the last seven years empowering creative experimentation across art, science, technology and enterprise for urban and remote communities in Queensland. Two examples are Creative Community Computing and I Made a Cubby.

Creative Community Computing is a long-term project that looks to develop ICT self-sufficiency in marginalised communities, working with reclaimed corporate ICT hardware. ICT self-sufficiency means that by the conclusion of the program, the participant will have developed a foundational understanding of how a personal computer works – from hardware through to operating systems, software and practical use – ensuring they will not require further support in meeting their personal computing needs. Participants dismantle the computer to components, exploring together what each part does, how each works with the others to make up a computer and how to reassemble it. They install free and open source software (FOSS) and operating systems, and they learn how to use programs for media, communication and education tasks. At the end of the program, the participant takes the computer home.

Initially this was a program delivered by SLQ The Edge, but over the past two years it has undergone a comprehensive documentation process for release of the whole program under a Creative Commons license.

The I Made a Cubby project invites families to work with designers to realise a bespoke cubby house for their children. This program provides the necessary training for parents to fabricate their design using maker technologies. Not only is there a significant learning process in building the cubby, there is also the positive affirmation received from friends and family who see the creation realised. This project has a significant social inclusion agenda, ensuring that a family's financial situation does not prevent their involvement.

Both projects have, at their core, a commitment to addressing the (deepening) digital divide in community and putting the tools (for free) into the hands of individuals and organisations.

Presenter Daniel Flood, Creative Manager, State Library of Queensland, The Edge

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‘Real’ science is taught in universities; consumer technology comes in a tamper-proof black box and art is an eldritch pursuit. With these areas of practice there are barriers – financial, educational, social, cultural, psychological – that prevent many communities from engaging beyond the STEAM equivalent of finger painting.

Daniel Flood, State Library of Queensland

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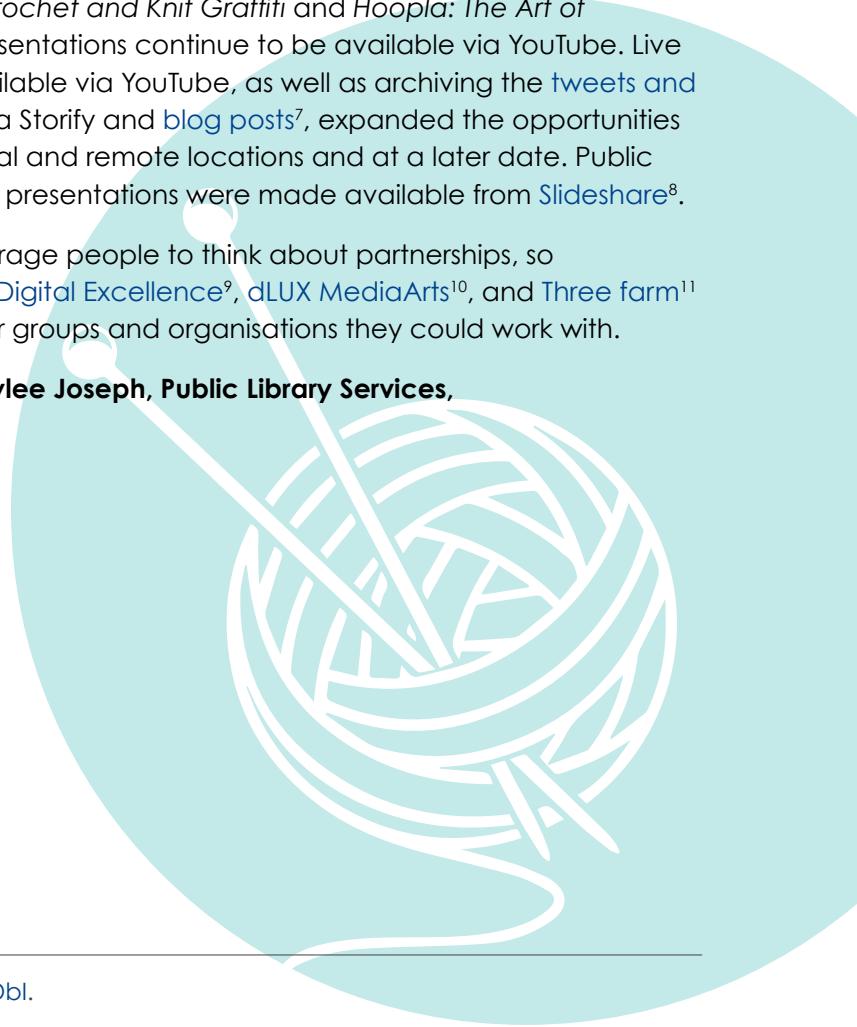
INSPIRATION AND IDEAS FROM THE STATE LIBRARY OF NSW

The State Library hosted a seminar Makers, Craftivists and Public Libraries on 6 May, 2015, to engage a broad audience of NSW public library staff in exploring a range of ideas and opportunities in the many different areas of creative endeavour that are variously described as makers, hobbyists or STEaM focused programs.

A couple of industry experts joined the seminar via Google hangout to share their experiences, [Jessica Pigza](#)⁴ author of *BiblioCraft: A Modern Crafter's Guide to Using Library Resources to Jumpstart Creative Projects* and [Leann Praine](#)⁵, author of three books *Strange Material: Storytelling Through Textiles*; *Yarn Bombing: The Art of Crochet and Knit Graffiti* and *Hoopla: The Art of Unexpected Embroidery*. These keynote presentations continue to be available via YouTube. Live streaming these talks and making them available via YouTube, as well as archiving the [tweets and links](#)⁶ that were shared during the seminar via Storify and [blog posts](#)⁷, expanded the opportunities for public library staff to view them in regional and remote locations and at a later date. Public library initiatives were showcased and these presentations were made available from [Slideshare](#)⁸.

Part of the aim of the seminar was to encourage people to think about partnerships, so presentations from people from [Indigenous Digital Excellence](#)⁹, [dLUX MediaArts](#)¹⁰, and [Three farm](#)¹¹ to help library staff see that there were other groups and organisations they could work with.

Presenters Andrea Curr, Ellen Forsyth and Mylee Joseph, Public Library Services, State Library of New South Wales



⁴ <https://www.youtube.com/watch?v=ZJpoDkxBDbI>.

⁵ <https://www.youtube.com/watch?v=TTd6VGNy9al>.

⁶ "Makers, Craftivists and Public Libraries (Part I) (with Images, Tweets) • Pls_sl • Storify." Storify, https://storify.com/pls_sl/makers-craftivists-and-public-libraries. Accessed 7 February, 2017.

⁷ "Jessica Pigza at Makers, Craftivists, and Public Libraries: Collections and Community Connections." State Library of NSW, 13 May, 2015, www.sl.nsw.gov.au/blogs/jessica-pigza-makers-craftivists-and-public-libraries-collections-and-community-connections. Accessed 7 February, 2017.

⁸ "'nswpln2015' on SlideShare." Share and Discover Knowledge on LinkedIn SlideShare, 2015, www.slideshare.net/search/slideshow?searchfrom=header&q=nswpln2015. Accessed 21 February, 2017.

⁹ Indigenous Digital Excellence Home, idx.org.au/. Accessed 21 February, 2017.

¹⁰ DLux MediaArts, www.dlux.org.au/. Accessed 21 February, 2017.

¹¹ Three Farm, <https://facebook.com/threefarm.network/>. Accessed 24 May, 2017.

CANADA: NEW MEDIALAB AND FAB LAB FOR QUEBEC

In February 2017, the Brossard Public Library launched the **Fab Lab**¹², a new digital learning space for its community. It is open to everyone, children, teens, students, artists, entrepreneurs, professionals and creators.

The 105 m² space has been designed to accommodate 37 seating areas, a large counter-height central work area, three team work tables, as well as counters all around the room to accommodate the various pieces of equipment. These include 3D printers, laser cutter, digital sewing machine, vinyl and paper cutter, hot press, electronic and computer components, button presses and much more.

Brossard Public Library's Suzanne Payette explained: "The Fab Lab project promotes several key elements one will expect to find in a 21st century library. Learner empowerment and integrated learning opportunities, common spaces for engagement and connection between people, access to hitech equipment and tools for transformation as well as innovative approaches for exploration and creation are a few examples of these elements."

A few weeks after STEAM into Sydney, Repentigny Public Libraries opened a new Medialab, a 300 m² multimedia laboratory developed with, and for the use of, young people. It has been funded jointly by the City of Repentigny and Quebec's Ministère de la Culture et des Communications.

Presenters Chantal Brodeur, Library Director, Repentigny Public Libraries and Suzanne Payette, Director, Brossard Public Library

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The Medialab is a place of informal learning aimed at giving young people the right tools to guide them through their projects. Once the project has taken shape, the participant will be encouraged to share the newly acquired knowledge as well as the realisation itself.

**Chantal Brodeur,
Library Director,
Repentigny Public Libraries**

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Photo: Chantal Brodeur, Repentigny Public Libraries

¹² Fab Labs are an initiative of the Massachusetts Institute of Technology designed to provide widespread access to modern means for invention. They began as an outreach project from MIT's Center for Bits and Atoms (CBA). <http://fab.cba.mit.edu/about/faq/>

NEW ZEALAND: LOWER HUTT CLUBHOUSES FOR DISADVANTAGED YOUNG PEOPLE

Hutt City Libraries runs a Clubhouse¹³ after-school program for 10-18 year olds in two of its highly deprived communities. It is a free program, run by library staff and volunteer mentors.

Denise Clarkson, a member of the Hutt City Libraries leadership team, said: "In the last year attendees have learnt Photoshop, completed basic electronics projects with makey-makey kits, mashed up circuitry with fashion design, made and edited films, taken part in robotics competitions, completed graphic design jobs for community clients, formed a band, recorded tracks, and created start-up businesses."

Presenter Denise Clarkson, Hutt City Libraries

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We [libraries] needed to be seen as an innovator, and as being integral and important to the social and economic development and future of the city.

Lillian Pak, Hutt City Libraries, Lower Hutt, New Zealand

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Photo: Denise Clarkson, Hutt City Libraries

¹³ The Clubhouse Network is a global community of over 90 Clubhouses in 19 countries. It was founded in 1993, in collaboration with the MIT Media Lab. The flagship Clubhouse is based at the Museum of Science in Boston. <http://www.computerclubhouse.org/>

NORWAY: BERGEN'S DIGITAL ARENA

Digital technology and knowledge are at the core of Bergen Public Library's Digital Arena. The goal is to turn the library into an arena of learning, debates and experiences in the fields of new media and digital technology.

In the Digital Arena, Lær Kidsa Koding! (Teach Kids Code!), inspired by the British Code Clubs, is working to provide children with an introduction to computer programming. The library hosts an entry level course for children, the Code Club, teaching children the basics of coding through Scratch and NXT Lego Mindstorms. The library also offers a separate code club for refugees and immigrants.

As there are fewer girls in Code club, the library holds therefore a separate Girl Tech Party once a year. Girls aged 8 to 10 learn coding, soldering, makey makey and hardware programming.

In summary, Bergen Public Library's Leikny Indergaard, said, "The new public library must usher in people on their own terms, create networks, facilitate activities and be the meeting place required by future citizens."

Presenter Leikny Indergaard, Bergen Public Library, Bergen, Norway

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The new public library must usher in people on their own terms, create networks, facilitate activities and be the meeting place required by future citizens.

**Leikny Indergaard,
Bergen Public Library,
Bergen, Norway**

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Photos: Leikny Haga Indergaard, Bergen Public Library, Norway



SWEDEN: MANUFACTURING SKILLS FOR ASYLUM-SEEKERS

In the south of Sweden, Vaggeryd's joint public and upper secondary school library is the site of the first makerspace in Sweden, opened in 2013. Over the last four years, makerspace programs have evolved to meet the technical skills needed in a community where furniture making is the main industry. There are workshops on robotics, lessons in CAD drawing, and the library is home to an upholstery machine that has enabled asylum-seeking unaccompanied minors to learn upholstery and carry out furniture repair as a social enterprise.

Library Director Lo Claesson explained, "Asylum-seeking students have also come to makerspace to try out different equipment like the laser cutter, the 3D-printer or sewing machines. If they will get a residence permit then this could help them decide the kind of education or job they would like. If they don't get permission to stay, these skills will help them anyway. At the very least it will be something meaningful to do while they are waiting and may help distract them from distressing thoughts and memories."

Presenter Lo Claesson, Library Director, makerspace, Sweden

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Lo Claesson, Library Director, makerspace, Sweden

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Photo: Byarums Bruk, Sweden





Photo: Chantal Brodeur, Repentigny Public Libraries



Photo: David Samuel, Cumberland Libraries



Photo: Miranda Soliman, Randwick City Library



Photo: Cathryn Ferencz, Geelong Regional Library Corporation



Photo: Suzanne Payette, Brossard Public Library, Canada



Photo: Suzanne Payette, Brossard Public Library, Canada

Photo: Chantal Brodeur, Repentigny Public Libraries





AUSTRALIAN
PUBLIC LIBRARY
ALLIANCE

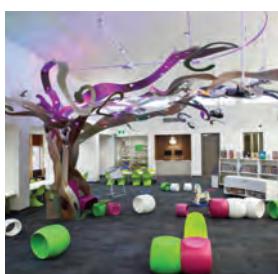
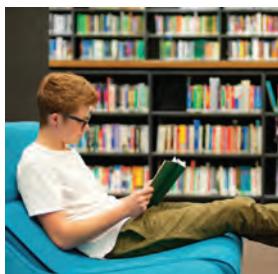


Australian Library and
Information Association

10 ways that libraries power Smart Cities

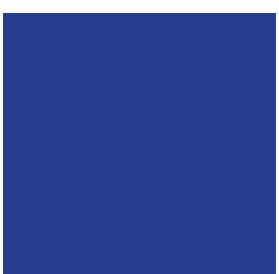
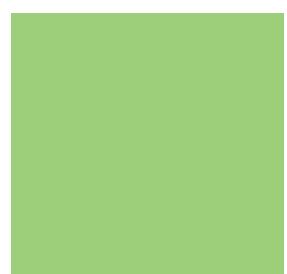
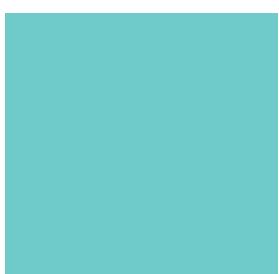
AUSTRALIAN PUBLIC LIBRARIES

The 1,530 public libraries in Australia range from flagship civic buildings through to much loved mobile libraries. There are 8.6 million registered library members and many more use the service, resulting in more than 112 million visits each year. All this at a cost of less than \$45 per capita and with a return of \$2.90-worth of community benefits for every dollar invested.



AWARD-WINNING DESIGNS

Public libraries are often the physical manifestation of a city's ambition to be a smart city. They provide both an architectural focal point and engaging experiences that help create a strong sense of community.





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TECHNOLOGY HOTSPOTS

Libraries offer high speed broadband internet connection in a safe, friendly community space. There are more than 11,500 public access PC terminals, tablets and other devices (including technology petting zoos), together with spaces for exploring innovative digital technologies. Training courses in the library and informal help from staff enable people to develop the skills they need to engage with government's digital transformation. Public libraries support cybersafe online experiences for all ages and more than half are registered in the eSmart Libraries program.

ECONOMIC PROSPERITY

Public libraries attract job seekers — drawn by free newspapers and internet access — and people interested in starting up their own businesses. Libraries also provide facilities for teleworkers needing work space outside the home; small businesses seeking affordable web conferencing facilities and meeting rooms, and independent consultants conducting research for clients through library databases.

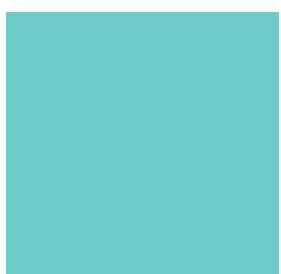


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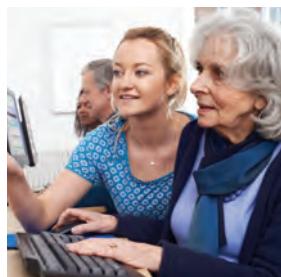
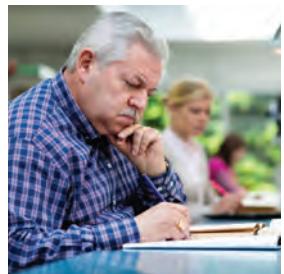
CREATIVE INDUSTRIES

Australian libraries provide valuable support for creators and publishers. We buy more than \$128 million-worth of books, ebooks and other materials every year. We introduce authors to book buyers (people who borrow books are also book buyers) and help people discover and rediscover the joy of reading, creating new audiences. Author talks in libraries are a useful source of income for writers and a good way to promote their work, and writers and illustrators use library collections as the source for their stories and drawings.



LITERATE NATION

Public libraries support reading from birth. Annually, some 121,000 storytime and rhymetime sessions attract 3.1 million participants, and there are 171 million loans of books, ebooks and other items. As well as reading and writing, libraries support digital, financial and information literacies.



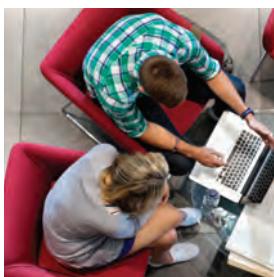
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INFORMAL LEARNING

From storytime for babies and toddlers, through to IT courses for seniors, public libraries take a cradle to grave approach to lifelong learning. People of all ages can find free training in the library to update their skills and explore new interests. Coding and robotics are the latest additions to a growing range of topics.

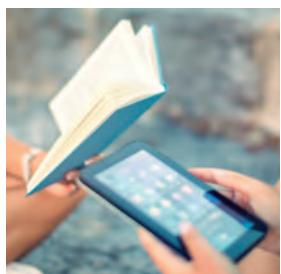
FORMAL EDUCATION

Public libraries support formal education from primary school through to tertiary, from homework clubs for teens, through to partnerships with distance education providers, where students use public libraries as local meeting and study spaces.



7





DIGITAL ACCESS

Libraries create valuable and engaging digital content using items from their historical collections, and they share this through the National Library of Australia's Trove platform. They also enable library users to create new works using the materials and technology in their collections. Students, entrepreneurs, humanities researchers, family historians, writers and others benefit from access to millions of books, manuscripts, images, maps and other materials.

EQUALITY

Public libraries reach out to all members of their communities and provide special services for people who are housebound. Ebook technology has improved the range of reading material available to people with print disabilities. Pre-loaded tablets provide access to content and the ability to increase text size and activate audio as needed.



9



ENGAGING NEW MIGRANTS

The public library is one of the first points of contact for new arrivals. There are newspapers, magazines and books in first language, and English classes for those who need them. Library staff help migrants find out about government services and the support that is available to help them find work or study opportunities.

