

2016

Digital Equity and Social Inclusion

Exploring the role that Queensland Public Libraries and effective digital policy play in bridging the digital divide

William Wood under the mentorship of Dr. Elham Abdi
Produced on behalf of the State Library of Queensland
11/6/2016



Table of Contents

1. Introduction	2
2. The Queensland Public Library Context	3
<i>2.1 Public Library Administration in Queensland.....</i>	<i>3</i>
<i>2.1.1 Public Library Services</i>	<i>3</i>
<i>2.1.2 Indigenous Library Services.....</i>	<i>4</i>
<i>2.2 Disadvantaged Groups in Society.....</i>	<i>4</i>
3. Defining the Digital Divide	5
5. Digital Inclusion and Equitable Access	7
6. Public Libraries and Bridging the Digital Divide.....	8
7. The State Library of Queensland: In Support of Public Libraries	10
8. Funding for Public Libraries in Queensland.....	12
9. State Government Initiatives and Commercial Partnerships	15
10. Current State Government Digital Policy	18
11. Limitations of Existing Digital Policy	20
12. In Support of Re-evaluating Digital Inclusion Policy	23
13. Conclusions	24
14. Recommendations.....	25
References	27

1. Introduction

We live in a society that is increasingly dependent on the technology that makes our daily lives easier, that tracks our health and wellbeing makes our businesses more profitable and our economy and political system easier to analyse, manage and access. Unless of course you are part of the 14% of Australians who in 2014-15 still do not have access to the internet at home (Australian Bureau of Statistics, 2016). There is a growing expectation that individuals must engage in online environments if they wish to retain access to vital services and be considered active participants in the modern world (Burke, 2013). Promoting and encouraging the development of digital literacy skills is an essential part of empowering and assisting individuals to actively participate in the social, political, economic and cultural aspects of modern communities. Public libraries in Queensland have long been involved in the development and delivery of a wide range of programs and services that seek to enhance the digital skills of local community members. It is now more important than ever to develop an inclusive culture of connection and learning that aims to improve the digital capabilities of those who are disadvantaged and most affected by the digital divide.

You would be forgiven for thinking that current research released by the Australian Bureau of Statistics concerning the household use of technology indicates that the digital divide will soon be a thing of the past. The data shows strong positive growth in Australia with 86% of households now having access to the internet in 2014-15, which is up from 83% in 2012 and from 67% in 2007-08 (Australian Bureau of Statistics, 2016). This encouraging trend however masks the mounting inequity experienced by the most disadvantaged members of society for whom the issues that come with being offline only continue to grow. As the digital divide narrows, it gets ever deeper (Ewing, 2016).

This research project aims to develop a better understanding of the role that public libraries in Queensland play in bridging the digital divide and the impact that current programs and services have on levels of digital inclusion across the region. This will be achieved through an analysis of major programs and initiatives that have been tailored by libraries to suit the growing needs of disadvantaged individuals and communities. The aims and objectives of these digital services will be examined in conjunction with industry publications, State Library documentation and existing government policy in order to highlight any gaps that may exist in current practice and to

establish recommendations for future policy, continued program development, funding and research.

State and public libraries need to continue to conduct research of this nature in order to develop a greater understanding of the sorts of impactful programming that assists users to become more comfortable with the use of technology, that promotes lifelong learning and empowers them to take an active role in improving their own digital literacy (West, 2011).

2. The Queensland Public Library Context

This section of the report will outline the administrative structure of public libraries in Queensland before examining the specific groups in modern society that require the most support if they are to participate in modern society. As we move forward into an era of widespread digital dependence and the levels of online connectivity grow, the disadvantage faced by those who are not online or with limited access steadily increases. Regional and low income populations, the unemployed, the disabled and the elderly are most at risk of being unable to participate in the digital conversation which limits opportunities and access to necessary services (Vinson, Rawsthorne, Beavis & Ericson, 2015). As such there is a growing need for free and publicly accessible programs and services that specifically target and directly benefit these disadvantaged demographics. Programs provided by public libraries are unique in their capacity to improve individual quality of life and assist in providing populations with equal access to the internet and the wider global community.

2.1 Public Library Administration in Queensland

This structure of the public library services available in Queensland has been informed by the State Library of Queensland (SLQ) classifications outlined in *The Library Dividend: Technical Report* (SGS Economics and Planning, 2012). SLQ characterises and funds public library services in Queensland according to two distinct categories: Public and Indigenous Library Services.

2.1.1 Public Library Services

The network of public libraries in Queensland includes both independent and rural services.

Independent libraries are operated and funded by local city and shire councils with some financial support from the Public Library Grant Scheme. The level of funding that each library receives is decided using a needs based weighting system that allocates allowances for programs, services and the purchase of materials used to develop and maintain collections across the region. There are currently thirty-one local councils that manage over two hundred independent libraries across the state.

Rural Libraries Queensland (RLQ) are library centres based in remote regions and rural communities that provide services and programs for populations below 15,000. RLQ libraries also receive funding from the Public Library Grant scheme which is then pooled in order to increase leverage when buying materials for shared collections. There are 68 rural libraries in Queensland that are maintained by twenty-eight local councils.

2.1.2 Indigenous Library Services

Indigenous Knowledge Centres (IKCs) provide traditional library services and learning opportunities while also acting as a community hub that facilitates the recording, preservation and celebration of the cultural experiences of Aboriginal and Torres Strait Islander people. There are 21 IKCs located in the Queensland region that are maintained by ten local councils with support from the State Library.

2.2 Disadvantaged Groups in Society

There exists a schism in society between those who demand ubiquitous digital services from organisations, institutions, and public services and those who lack even the most basic access to technology or the skills to use it effectively (Burke, 2013). Queensland Public Libraries are attempting to change this by actively developing programs and services that seek to engage disadvantaged communities in the pursuit of digital equity (State Library of Queensland, 2013).

The key demographics targeted by public libraries in this context are:

- Senior and elderly populations
- Rural and regional communities
- Low socioeconomic communities

- Indigenous Australians and Torres Strait Islander communities
- Individuals living with a disability or impairment
- Culturally and linguistically diverse communities
- Individuals and families who have recently emigrated

Through developing a better understanding of the limitations faced by these communities, public libraries can tailor programs and services based on individual needs and motivations in order to work towards a future where those who have the most to gain from being online are able to become active participants in our modern, digital society (West, 2011).

3. Defining the Digital Divide

Modern society increasingly demands that its citizens be online in order to access vital public services that were once freely available in person. As technology has advanced, it has directly impacted the operations of organisations and government departments and has significantly changed the way that users interact with providers of goods and services (ACOSS, 2016). A less restrictive approach to the management of global telecommunications providers has resulted in a competitive market, stimulated by the growing demand for increased access, faster connection speeds and the pervasive implementation of technology (OECD, 2001). While this transformation has fuelled innovation, made once laborious paper-based processes more convenient and improved access to services for many, this widespread adoption of technology has also exacerbated existing societal inequalities by creating more barriers for already disadvantaged communities (Curtin, 2001). The term 'digital divide' is used to describe the gap that exists between those individuals with the capacity to access and use information and communication technology and the specific demographics in society who do not have the digital literacy skills required to use it or simply do not have access at all (West, 2011; Burke, 2013).

4. Challenges and Circumstances

The depth of the digital divide in a given area is dictated by a number of factors that can include the age of individuals, their socio-economic background, education and geographical location. Research conducted by the Australian Bureau of Statistics confirms this by highlighting that only 70% of unemployed Australians use the internet compared to 93% of employed individuals and that compared to 96% of those who hold a bachelor degree or higher, only 77% of individuals educated to grade 12 or below use the internet regularly (Australian Bureau of Statistics, 2016). On the surface this appears to be a fairly insignificant statistical difference but it must be noted

that as more Australians participate in digital society the disadvantage that comes with being unconnected continues to mount - as the divide narrows, it gets ever deeper (Ewing, 2016).

In the Australian context, the digital divide is exacerbated by the sheer size of the country and the issues that come with implementing sustainable infrastructure across rural and remote regions (Curtin, 2001). While internet and technology usage has risen steadily in recent years, there is still a noticeable division between the levels of access in regional areas and metropolitan cities.

'Dropping off the Edge 2015' is an analysis tool that was specifically created to identify the geographical areas in Australia that are most affected by socioeconomic disadvantage and are therefore more likely to be impacted by digital inequity, low levels of digital literacy and limited access to technological infrastructure (Vinson, Rawsthorne, Beavis & Ericson, 2015). This study has used over twenty categories as a framework for testing levels of social inclusion, political engagement, health and wellbeing, educational ability and economic stability before each region was then ranked according to the overall level of disadvantage (Vinson, Rawsthorne, Beavis & Ericson, 2015). The findings of this study aim to assist governments and policy makers in the redevelopment of public strategies by providing a clear snapshot of existing inequalities.

The Queensland State Government in partnership with public services, advocacy groups and industry stakeholders are faced with the challenge of reconciling social inequity inherent in the system and removing barriers to access that if left unchanged will continue to isolate communities that are estranged from an increasingly digital democratic system and less able to participate in modern society. The experiences of disadvantage that shape the lives of so many Australians are not evenly distributed across our nation but are instead geographically focused, complicated and persistent (Vinson, Rawsthorne, Beavis & Ericson, 2015). The Queensland Government cannot herald ubiquitous technology as an equalising medium without first acknowledging that underlying social, economic and technical barriers must be addressed as part of future policy (Curtin, 2001; Vinson, Rawsthorne, Beavis & Ericson, 2015).

Access to the internet is seen as a basic human right and yet the individuals and communities who could benefit the most from its use are those who are affected most strongly by the digital divide due to social inequities. Any policy or program that is designed to bridge social inequality

and deprivation must therefore incorporate digital inclusion methods if it is to be successful within the current context.

5. Digital Inclusion and Equitable Access

The digital divide has given rise to a growing focus on digital inclusion policy and programming that aims to improve levels of access and also ensure that the continued development and implementation of emergent technologies does not isolate the most vulnerable sectors of our society (ACOSS, 2016). Digital inclusion can be measured by analysing a population's engagement with technology, levels of literacy, educational outcomes and interactions with government public services.

Research into the impact of the digital divide highlights a concerning trend regarding the use of and access to technology in geographic areas known to already experience social and economic inequality (Vinson, Rawsthorne, Beavis & Ericson, 2015). There is a much higher chance that the ever changing digital landscape will exacerbate the issues faced by those who are already starting from a position of social disadvantage and exclusion (ACOSS, 2016). This requires that any proposed solution to digital inequity must also consider the underlying socio-political disadvantage from which much of the wider digital issue originates. In saying this though, effective digital programming and services assist communities to develop skills and knowledge that can allow them to transcend environmental barriers and access opportunities that can improve personal development and quality of life.

Digital inclusion is the process of implementing policies, programs and procedures that seek to close the digital divide by empowering individuals through the provision of digital literacy education and training (Information Policy and Access Centre, 2014). It is a framework that attempts to address the individual needs of a community rather than focusing on the technological access available to a given region. Public libraries have long been considered active facilitators and promoters of community projects and initiatives and with the exception of schools and perhaps some community centres, are uniquely placed to capitalise on this role in support of digital inclusion (West, 2011). It has been put forward by government departments and policy makers that the internet, as an unprecedented resource for communication and information access will inevitably replace libraries in the delivery of knowledge and training (Burke, 2013). The internet however, does not yet contain all sources of information such as

localised and highly specific or rare material and cannot hope to ever replace the physical services offered by libraries through access to space and technology, face to face education and training opportunities. The very thought that governments feel that libraries could be replaced by the internet though should be motivation enough for public libraries to increase their efforts in transforming public opinion. This should be achieved through continued advocacy initiatives and by reimagining the role of public libraries to be one that encompasses both traditional and new services while also moving towards discovering what libraries will provide for communities into the future (McMenemy, 2009).

6. Public Libraries and Bridging the Digital Divide

It is clear that the opportunities presented by the advent of digital ubiquity have not been evenly disseminated amongst populations. There exists a clear disparity between those with the privilege of access and education and those few who are increasingly isolated and excluded from the digital frontier (American Library Association & Information Policy and Access Centre, 2013). There is mounting evidence that confirms that the digital divide is a multi-faceted issue that is directly influenced by existing socioeconomic inequalities and requires a community focussed approach that directly targets the most affected demographics (De Aizpurua, 2016). As one of few community institutions that are able to provide such a service, public libraries are well positioned to deliver the vital functions necessary to help close the digital divide while also substantiating their case for increased funding and support (McShane, 2011; McMenemy, 2009).

Public libraries operate as environments for social inclusion and have been traditionally accepted as working parallel to the education industry as the leading providers of informal instruction and self-directed training (McShane, 2011; Thompson, Jaeger, Taylor, Subramaniam & Bertot, 2014). As digital technologies have become more pervasive, necessitating improved levels of digital literacy, the line between the traditional and unofficial education sectors has blurred in ways that are yet to be fully appreciated by state and federal governments (McShane, 2011).

Through the provision of access to information and by facilitating engaging programs, libraries seek to meet the needs of the widest possible range of individuals in the local community.

Under the expert guidance of library and information professionals these services are at the forefront of digital inclusion initiatives and are critical in improving levels of digital participation

and in raising public awareness of this issue through the promotion of digital equity (American Library Association & Information Policy and Access Centre, 2013). Public libraries have been endorsed as a leading solution to emerging social problems due to the active role they play in developing levels of information and digital literacy (McShane, 2011).

In order to achieve these goals effectively and bridge the digital divide, public libraries promote digital inclusion in a number of ways (McMenemy, 2009; American Library Association & Information Policy and Access Centre, 2013):

- Through the provision of publicly accessible technology in local communities.
- Through the provision of a wide range of digital content specifically curated for local communities.
- Through the provision of digital literacy instruction public libraries empower individuals to be able to access, understand and evaluate digital content.
- Providing community members with new skillsets that allow for self-directed learning, the creation of new content and the use of a range of information and communications technologies.
- Through the provision of vital programs and services tailored to the specific needs of the community in areas such as education, health, employment and democratic engagement.

The widespread implementation of digital technology has not only affected individuals and communities but has also impacted upon the processes of the library itself through the automation of aspects of service delivery. In a report conducted by QUT in partnership with the State Library of Queensland, researchers found that advances in library technology such as automated book returns and self-serve checkout stations have been welcomed by users and have granted librarians more time to facilitate programs and engage with members of local communities (Mertens, Dahlke, Bennett & Briggs, 2016). It is worth noting that this research also identified how important it is for the customer to have a choice between automated services and traditional human interactions. Evidence highlighted that personal connections and experiences were a key motivator for users in continuing to return to the library (Mertens, Dahlke, Bennett & Briggs, 2016). This simple fact can be seen as a microcosm of the unique role that libraries play in bridging the digital divide - by providing access to information technology that is deeply rooted in personal interaction and experience.

7. The State Library of Queensland: In Support of Public Libraries

The State Library of Queensland has developed a forward thinking prospectus entitled *The Next Horizon: Vision 2017* that defines the future direction for public library services in the region and supports these recommendations through an analysis of the economic and social benefits that such services provide to individuals and communities (State Library of Queensland, 2013). This brief aims to position libraries for the future and enable them to be more responsive to trends and expected developments that will affect both the industry as a whole and the wider environment in which libraries operate (State Library of Queensland, 2013). *The Next Horizon: Vision 2017* acknowledges the traditional role that libraries have played as community hubs and centres for lifelong learning and recognises that rapid developments in the field of digital communication technologies has required the modern library service to be more adaptable, innovative, and transformative whilst still retaining the values that foster a culture of inclusive participation and engagement (State Library of Queensland, 2013).

The State Library of Queensland has utilised local and international research to develop and contribute to a deeper understanding of the changing needs of communities and the role that public libraries can play in increasingly pervasive digital environments. Current State Library policy supports council library initiatives under the guiding principles of the following four key themes that aim to reposition libraries to be better able to respond to anticipated trends and issues faced by the industry (State Library of Queensland, 2013):

- Creative community spaces
- Connectors - physical and virtual
- Technology trendsetters
- Incubators of ideas, learning and innovation.

These themes align with aspects of the digital divide that require a unified and targeted response if the issues associated with digital disadvantage are to be rectified over the coming years. These overarching goals are helping to position Queensland public libraries as innovative and adaptable service centres whose strong community focus enables them to actively respond to the changing needs of local demographics. This is achieved through the support of lifelong learning, digital and

information literacy instruction, partnerships with local industry and community groups and by fostering an inclusive culture of access, diversity and equity for all.

This goal of equal opportunities for all individuals regardless of geographic location, age, ethnicity, socio-economic background, disability, gender or education resonates strongly with the Australian ethos and is redolent of the idea of the 'fair go'. Australia is home to large communities from linguistically and culturally diverse backgrounds including newly arrived refugees and skilled migrants, for whom the public library is often the first point of contact (Migliorino, 2011; State Library of Queensland, 2013). These individuals, often with low level English language skills and limited access to the internet rely on public libraries to dismantle barriers to digital inclusion. The same can be said of remote Indigenous and Torres Strait Islander populations, suffering from disadvantage and social isolation, who seek support and education through library programming. Evidence clearly suggests that these remote and rural areas in Queensland are home to some of the most underprivileged communities in the country and are at risk of becoming completely excluded from modern society without the services provided by public libraries and Indigenous knowledge centres (Vinson, Rawsthorne, Beavis & Ericson, 2015; Migliorino, 2011).

It should be noted though that the difference made in the lives of these individuals is not achieved easily or without challenge. Public libraries and knowledge centres in rural Queensland are hindered by a lack of resources, poor digital infrastructure, unstable internet connections and low budgets that result in undertrained staff and limited support for the preservation of library services in these complex environments (Wyatt, McQuire & Butt, 2015). It is therefore fortunate that the State Library is taking such an active role in public library advocacy and campaigning for improvements to these conditions. The State Library and the Queensland public library network acknowledge that community members themselves are best placed to inform the creation of new digital inclusion policy and have been relying on feedback from users and wider populations to accurately assess the needs of demographics in ways that can be presented to the State Government as evidence of the need for further support (State Library of Queensland, 2015).

We live in a knowledge rich society, characterised by a wealth of ideas and where participation is dictated by an individual's fluency in communication and their ability to access and apply information readily (State Library of Queensland, 2014). The ability to engage actively with this modern democracy is limited to those with an understanding of the multi-modal literacies linked to digital technology, information and culture (Migliorino, 2011). If the State Government wishes all

Queensland constituents to more effectively fulfill their civic responsibilities then they must uphold their end of that equation by acknowledging the difference that public libraries are able to make to social inclusion and provide funding and support accordingly. This is not to say that grants or funding do not exist, as such initiatives will be explored in the following section of this report, but rather that the monies allocated do not accurately reflect the impact that is currently made.

8. Funding for Public Libraries in Queensland

Queensland public libraries are primarily funded by local councils and receive comparatively limited direct funding from State Government budgets (see fig.1). Thankfully, the public library system also receives support and funding from the State Library of Queensland and local industries through initiatives such as the Online Public Access in Libraries (OPAL) Program which provides \$600,000 annually towards digital programming that aims to support online access to information (State Library of Queensland, 2015). Through these grants SLQ is providing public libraries with the means to “accelerate the transition” from isolation to digital inclusion (State Library of Queensland, 2015).

Fig. 1 - Income Sources of Public Libraries (2010-11)

	TOTAL (\$)	INCOME PER CAPITA
Income/ contribution from local councils	\$172,294,896	\$39.03
State Govt Grants	\$17,167,879	\$3.89
Other Grants	\$928,841	\$0.21
Revenue	\$3,365,464	\$0.76
TOTAL INCOME	\$193,971,589	\$43.94

The Library Dividend: Technical Report (SGS Economics and Planning, 2012)

The following three projects are a selection of the initiatives that were funded by the “Technology Trendsetter” grants which are a part of the OPAL funding initiative (State Library of Queensland, 2015). These initiatives are representative of public library programming that is both digitally engaging and responsive to the changing needs experienced by users in different communities. It is important to note that all of the listed programs were implemented on budgets of under \$20,000 which highlights the positive impact that can still be made with

restrictive funding and lends weight to the obvious argument that even more could be achieved with increased financial support.

Fraser Coast Regional Council - Maryborough E-Space

Fraser Coast Regional Council will transform existing space into a new community hub for learning, working and creating. This E-Space will assist in digital skills development and provide access to emerging technologies.

Quilpie Shire Council - Technology in the outback

This project aimed to fulfil the technological needs of communities and visitors to the Quilpie Shire region by providing access to free Wi-Fi and smart devices at public libraries.

Sunshine Coast Council Libraries - Community Insight

The Sunshine Coast Council aims to collect data from geo-spatial mapping technologies to add to existing knowledge, isolate trends and capture insights into public libraries and their surrounding communities. This data will be put into a database and analysed to better understand client needs.

Redland City Council Libraries - Libraries2You

This project aimed to connect senior users to the collections of the Redland Council Libraries and improve their awareness of offered programs and services. Regular training sessions help to build digital competencies and promote self-directed learning.

In *The Library Dividend: Technical Report* produced for the State Library of Queensland an analysis of programs provided cumulatively by public libraries across the state reflect a strong focus on digital literacy and inclusionary programs and services (SGS Economics and Planning, 2012). The table below illustrates the total hours of planning and number of attendees over the studied year. It can be seen that the second highest number of facilitated programs were those that concerned digital literacy and they were the fourth most highly attended and made up 15.5% of the total programming hours. While these statistics are not as initially impressive as one might assume from the state-wide focus on digital inclusion, the cost of such programming must be taken into account when it is compared to the data for reading and basic literacy programs that make up the majority of public library offerings.

Fig. 2 - Queensland Public Library Programming (2011)

	Total Annual No. of Programs and Events	Programs Delivered in Collaboration with Community and Gov. Org.	Total Annual No. of Attendees	Total Annual Hours of Programming
Digital Literacy Programs (including technology, computer, Web 2.0 and Internet programs)	5,086	151	22,395	5,844
Early and Family Literacy Programs (including reading programs, school holiday programs, story-time sessions)	16,834	245	475,703	19,753
Young Adult Literacy Programs (not included in L.2, targeted at age group 13 to 18)	1,094	52	16,697	2,112
Adult Literacy Programs (including programs for beginning adult readers and lifelong learning)	4,027	434	66,559	6,508
Multicultural Awareness Programs (Harmony Day, Multicultural Festivals)	354	52	7,259	443
Other Public Events and Learning Programs	2,840	271	43,281	3,278
TOTAL	30,235	1,205	631,894	37,938

The Library Dividend: Technical Report (SGS Economics and Planning, 2012)

Research has shown that libraries that are adequately supported by local and state governments and have been able to make renovations to spaces or upgrades to network infrastructures have been proven to be able to offer a higher calibre of digital inclusion initiatives and thus are able to have a greater impact than those who did not (Information Policy and Access Centre, 2014).

In qualitative testing conducted by SGS Economics and Planning on behalf of the State Library of Queensland, users were shown to believe strongly that public libraries encourage social inclusion and facilitate lifelong learning by providing a safe and pleasant environment (SGS Economics and Planning, 2012). Surveyed library users estimated that an average of almost \$400 per year would need to be spent to be able to access similar services from private industries and stated that they would be willing to pay approximately \$50 per year in order to ensure that such vital community services could be maintained into the future (SGS Economics and Planning, 2012). Surprisingly, this even extended to non-users of the library who were still able to recognise the impact that public libraries can make in disadvantaged communities and would be willing to pay an average of \$30 per year to sustain library programs and initiatives (SGS Economics and Planning, 2012). This report concluded with evidence that showed that public libraries returned between \$230 and \$410 for every \$100 invested which is an indisputably positive affirmation of the return on investment that communities can experience from effective funding and support.

This research employed data analysis conventions that are endorsed by leading disciplines and align with the standards required by Commonwealth and State Treasury frameworks that define accepted cost benefit assessment procedures (SGS Economics and Planning, 2012). This approval by a leading authority validates the qualitative benefits of public libraries through the collection and analysis of quantitative data. This lends credence to claims that libraries often struggle to substantiate and provides a compelling case for further investment (SGS Economics and Planning, 2012).

9. State Government Initiatives and Commercial Partnerships

The Queensland State Government acknowledges the importance of building a strong digital economy that will sustain jobs and national growth after the current mining boom wanes and has taken steps to improve productivity and stimulate development (Deloitte Access Economics, 2015). If they are not careful however, the State Government could inadvertently exacerbate existing inequality by pushing forward with the widespread adoption of technology without first

resolving pervasive social inequity. (Queensland Government, n.d). Australia must ensure that its public services, education providers, social policy and commercial practices are unified under a common goal that seeks to equip citizens with the necessary technical skills to meet the rising challenges affiliated with digital disruption and allow them to actively participate in modern society (Deloitte Access Economics, 2015).

Tech Savvy Seniors Queensland is one such initiative that has aimed to increase digital competency and reduce social isolation for senior citizens across the region (State Library of Queensland, 2015). Telstra's Tech Savvy Seniors (TSS) program was designed to support older people get connected, and participate in the ever increasing online world. The Tech Savvy Seniors Queensland (TSSQ) program is a partnership between the Queensland Government (led by State Library of Queensland) and Telstra that is giving seniors across Queensland the opportunity to develop the skills and confidence to use technology. Together these stakeholders made a total of \$400,000 available to Queensland public libraries who were able to apply for individual grants of up to \$25,000 to be used in the provision of information technology education and training (State Library of Queensland, 2015). Sessions that commenced in February 2016 focussed on a range of prevalent issues including improving individual awareness of online security and facilitating access to online government processes and vital information services. Early results from this period have shown this initiative to be incredibly popular, with 1,972 seniors participating in just over 300 training sessions (State Library of Queensland, 2015). Positive feedback from participants has indicated that the majority of individuals who attended wish to keep doing so and this has resulted in future sessions being booked out well in advance. Effective programs such as this help to substantiate the role that public libraries can play in improving levels of digital inclusion and provide data that can be used to validate the importance of local and community based services in an effort to increase funding and support from state governments.

Government initiatives can be further improved through guidance and consultation with commercial industries, which also creates opportunities for mutually beneficial partnerships. One such partnership between Infoxchange and Australia Post, the Go Digi Project, aims to guide digital inclusion initiatives and digital literacy instruction across Australia in 2016 and into the future. The manifesto they have created aims to engage state governments and organisations, local communities, individuals and businesses and encourage them to play a role in the digital development of the nation (Infoxchange, 2016). The Go Digi Project plans to define the key areas

that Australia will need to focus on to ensure that all citizens have the opportunity to participate equally in a digital future and seeks to inform the creation of more inclusive and effective digital policy. The research conducted by this partnership confirms that public institutions such as community centres, public services and more specifically, public libraries, have the potential to become hubs for digital engagement that can actively respond to the individual needs of local communities (Infoxchange, 2016). The Go Digi Project literature concludes that government initiatives should seriously consider the impact that digital programs and policy will have on future levels of digital inclusion and ultimately equip all citizens with the tools necessary to become active and empowered members of a digital society (Infoxchange, 2016).

Implementing effective nationwide digital inclusion policy has been recognised as one of the more important social justice issues currently facing governments and communities worldwide. It is not just a simple question of providing the digital infrastructure in all regions due to the fact that each individual in a given community faces unique challenges and barriers to access and may experience digital deprivation in a number of different ways. This necessitates a local, personal response rather than a nationwide initiative that may only exacerbate the experiences of disadvantaged communities by appealing once again to the majority. Information and statistics collected by Telstra as part of the creation of their digital inclusion index quantifies these claims to create a resource that can be used by organisations and the Australian Government to create more effective public policy (Telstra, 2016). This in turn will allow for the creation of more targeted programs and initiatives based on conclusive evidence from the index that highlights the relationship between existing socioeconomic disadvantage and digital inequity (Telstra, 2016). Telstra concluded that while ease of access and the affordability of digital technology impacts widespread digital inclusion, the majority of issues arise from poor individual levels of digital literacy, a lack of understanding of the potential benefits of digital engagement and concerns about online security (Telstra, 2016). The solution to these challenges clearly lies in more effective education and instruction which can only be achieved through accessible programs and services similar to those already offered by parallel education institutions such as libraries.

The Queensland State Government is invested in developing a culture of digital engagement and has created the Advance Queensland initiative that will see \$405 million invested over four years in order to develop the knowledge based industries of the future (Queensland Government, n.d). It includes a series of programs that seek to increase innovation and improve our

international investment opportunities. This state-wide project wishes to accelerate growth in commercial industry and increase levels of employment into the future in the fields of digital information and enterprise (Queensland Government, n.d). This focus is vital to the development of the future Australian economy but not if it comes at the cost of further isolating our most disadvantaged communities by exclusively creating opportunity for privileged demographics while diminishing funding for frontline digital services. A balance must be sought that acknowledges the importance of both national digital policy and local digital initiatives that allow deprived communities to more effectively contribute to the national economy. Raising the standard of digital education in these areas will have a follow on effect that will not only improve quality of life in these regions, but enable individuals to pursue more gainful engagement with the civic system. There is a disturbing trend in the creation of public policy that focuses on a top down approach which only serves to deepen the inequality experienced by the most deprived echelons of a society.

10. Current State Government Digital Policy

Research shows that in order to succeed in a global, digital economy the Australian workforce will need to become increasingly aware of technological advancement and develop stronger levels of digital literacy (AlphaBeta, 2015). Policy choices made in the coming years will dictate whether or not Australian citizens are adequately prepared to face the challenges of the future and will decide the fate of those already most affected by the digital divide.

The Queensland Government recognises that information and communication technologies can be utilised to streamline civic processes and improve access to government services for individuals in regional and remote communities and has taken steps to deploy new systems and infrastructure. The *ICT Strategy 2013-17* outlines the state government's plans to develop better channels of communication between government departments, health services and wider communities (Department of Science, Information Technology and Innovation, 2013). This plan for the future seeks to make the government more approachable by allowing individuals to more easily interact and engage with specific departments, provide feedback and inform decisions through dialogue and debate (Department of Science, Information Technology and Innovation, 2013). The *ICT Strategy 2013-17* aims to reduce the cost of accessing traditional government support by increasing the amount of information available online and by making current processes more efficient and adaptable to future trends (Department of Science,

Information Technology and Innovation, 2013). The Queensland Government wishes to ensure that all Queensland citizens are able to interact with government services in the same way that they do with other digital utilities. This is both necessary and admirable but unfortunately fails to recognise the multi-dimensional barriers to access that extend beyond just needing the technology to be readily available such as the upkeep cost of personal computers and internet connections. The mere presence of interactive government services and digital infrastructure will not encourage the widespread adoption of these technologies in remote disadvantaged communities without the means for individuals to be educated in their use and to be able to access this support cheaply and reliably from public services.

The Queensland Government is also currently focussed on creating a more agile workforce that can respond easily to the concerns of a modern, digitally enabled society. The Department of Science, Information Technology and Innovation is leading this development through the implementation of the *ICT Modernisation Plan* that complements and supports the Advance Queensland government initiative and aims to imbue the region with a collaborative and innovative culture that promotes cooperation between individuals, organisations, industry and government (Department of Science, Information Technology and Innovation, 2016). The Queensland Government aims to achieve this by improving the way that information and communication technology is utilised by public services and by investing in education to ensure that the youth of today have the best opportunity to contribute to the future knowledge economy (Department of Science, Information Technology and Innovation, 2016). The *ICT Modernisation Plan* outlines a series of initiatives that seek to improve information and knowledge sharing procedures between government departments, to develop the skill sets of a future workforce and to improve levels of digital-readiness across the region (Department of Science, Information Technology and Innovation, 2016). This vision statement is similar in scope to the *ICT Strategy 2013-17*, in that it caters to the bigger picture ideal of a ubiquitous digital future without fully acknowledging the impact that the digital divide has on an individual's ability to access and use these services. Those who have the most to gain from accessible government support and information services could be pushed further to the fringes of society socially, physically and now digitally if the disadvantage inherent in the system is not first rectified.

The Australian government has shown that it is committed to digitising the nation through the above policy initiatives and through other initiatives such as the roll out of the National Broadband Network but a number of multi-dimensional issues and inequalities still exist for

individuals and communities that require greater recognition and a more targeted response if pervasive social inequity is to be resolved (ACOSS, 2016). We cannot rely on common claims that individuals will learn what they need through mere exposure to technology as this fails to acknowledge the role that levels of education, access and socioeconomic background have on digital literacy (AlphaBeta, 2015). If the development of a digitally literate nation is to be successful then greater emphasis will need to be placed on digital programming in schools and greater levels of funding and support will need to be provided to vital ancillary services like the public library system (AlphaBeta, 2015). Digital initiatives and literacy programs needs to extend beyond the limitations of current digital policy, beyond our education system and into free and accessible service sectors that foster inclusive cultures of collaboration and promote lifelong learning and education.

11. Limitations of Existing Digital Policy

Research has indicated that digital disadvantage directly limits political engagement and social participation; impacts upon levels of access to information and restricts individuals and communities from become active participants in society (Mariën & Prodnik, 2014). The internet was originally heralded as an equalising medium that would provide access to information for all people but in some cases has only perpetuated pre-existing societal hierarchies and social deprivation by replicating them in the digital space. This trend has become another indicator highlighting the distinction between privileged individuals with unfettered access and the disadvantaged few who stand to gain the most from digital technology, but are denied it through the challenges of circumstance (Mariën & Prodnik, 2014).

The Friends of Libraries Australia, a vocal advocacy group, argues that a disconnect exists between local, state and federal policy concerning the Australian public library system. They contend that a cohesive policy framework must be defined and endorsed by all levels of government in order to promote the continued growth and development of the public library system (Friends of Libraries Australia, 2008). They asserts that there is a lack of shared understanding within the three levels of Australian government concerning the role that public libraries actually play, the positive impacts that libraries can have on information and digital literacy and the high return that they generate from community investment (Friends of Libraries Australia, 2008). Newman and Gurstein identify this lack of understanding as the catalyst that

perpetuates the belief that the digital divide can simply be dismissed as an insignificant issue that is not worth catering for (Newman & Gurstein, 2016).

This statement highlights the commonly held belief that moving information or services online automatically makes them accessible to all, while conveniently ignoring the fact that a large percentage of Australians do not have regular access to the internet or the digital skills necessary to effectively use it. Newman and Gurstein assert that this lack of understanding is due in part to the phrasing of the issue and suggest that the problem needs to be reconceptualised in a way that will highlight the moral imperative embedded in the situation and create more public awareness for the social injustice of digital disadvantage (Newman & Gurstein, 2016). They argue that replacing the concept of the 'digital divide' with 'digital equity' in future policy could reframe the issue into an identifiable moral disparity that can be acted on by civil services and local and state governments (Newman & Gurstein, 2016). They then conclude that as the internet has been declared a basic human right, more should be done at the state and federal level to defend this right and to reconcile the disadvantage that still affects the stratum of modern populations already most at risk of social exclusion (Newman & Gurstein, 2016).

The role that public libraries play in supporting digital access, literacy skills and social inclusion is an area that is only just now being answered in ways that appeal to conventional standards of investment analysis and as such gaps still exist in the current body of research. Quantifying the impact that libraries have on communities has been difficult to articulate due to studies often producing experiential or empirical data rather than more tangible evidence produced by practical return on investment studies that are more effective in securing funding from government departments (Thompson, Jaeger, Taylor, Subramaniam & Bertot, 2014). The Friends of Libraries Australia agree that the only way for public libraries to truly influence future policy creation is through the collection of such demonstrative evidence. This requires that even more impact analysis and evidence based studies be conducted in order to further substantiate the role of libraries and unite the striated levels of government in the creation of more progressive policy and funding initiatives (Friends of Libraries Australia, 2008). Government representatives are actually in agreement with this, with many acknowledging that libraries are important and should not be allowed to fall into disrepair, but that changes in policy and funding are hard to rationalise without a more detailed understanding of the value that library services provide (Mertens, Dahlke, Bennett & Briggs, 2016).

There exists no other cultural institution that is as uniquely positioned to improve levels of digital and social inclusion in communities than public libraries. Yet while local, state and federal governments rely on this service to further digital benchmarks, often without really recognising or acknowledging that fact, these self-same government directorates are reducing funding and support and rolling out digital policy that fails to address existing social inequities (Jaeger, Bertot, Thompson, Katz & DeCoster, 2012). Subsequently, public libraries have been placed in an unsustainable position where they must respond to growing service demands and greater public expectations but without the support or funding in place to do so effectively (Jaeger, Bertot, Thompson, Katz & DeCoster, 2012). This then negatively affects perceptions of library services and perpetuates the confusion surrounding the role of libraries and their impacts on society.

As a government funded service, public libraries are in no way immune to the administrative difficulties commonly associated with bureaucratic process. Government management systems can complicate library issues by relegating decision making to parties who are often removed from the context and lack the insight or understanding to make effective choices. This results in libraries being stifled by red tape and public policy that seriously affects how they are able to communicate and engage with communities, ultimately reducing their ability to attract new clients, retain existing users and make an impact on the lives of community members (Mertens, Dahlke, Bennett & Briggs, 2016). Governments have essentially reduced the capacity of libraries to create such an impact before using the inevitable decline of the service to justify further funding cuts. There is a fear too, that by appealing to conventional standards of investment analysis, libraries will be increasingly pressured to reach profitable benchmarks based on narrowly defined categories (Mariën & Prodnik, 2014). This could influence the quality of service that is provided as financial returns become the driving force for funding initiatives rather than demonstrative societal impacts.

If this situation is to be resolved, it will require that all levels of government recognise the role that public libraries play in bridging the digital divide and acknowledge that as a key player in the necessary solution to social and digital disadvantage, public libraries require effective policy, funding and support that is in keeping with the significant impact that they have within local communities (Jaeger, Bertot, Thompson, Katz & DeCoster, 2012).

12. In Support of Re-evaluating Digital Inclusion Policy

Public libraries in Australia have long played a vital role in the dissemination of traditional information sources and in more recent years have become champions of digital inclusion by providing access and training opportunities for their local regions. Public services have been required to react and adapt to changing socioeconomic environments in order to support communities impacted by the widespread adoption of digital culture. As technology becomes increasingly pervasive, those without the means or the ability to access and utilise these tools will become second class citizens who are denied the opportunity to participate in modern society (Wyatt, McQuire & Butt, 2015). This demands a more conscientious response from policy makers and government departments with regards to the creation of more inclusive policy that aims to reduce the rising inequality that threatens remote, rural and low socioeconomic areas.

Bridging the digital divide has remained a challenging and multifaceted issue for Australia that cannot be fully reconciled without first responding to the pre-existing social inequality that is intrinsically linked to digital disadvantage (Ewing, 2016; Marx, 2016). The parallels that exist between social and digital inclusion necessitate a complex range of interventions, initiatives and policy changes that acknowledge the underlying issues that perpetuate barriers to access and engagement in all facets of modern life (Mariën & Prodnik, 2014). Once small changes are made however, the ensuing follow on effect would have a dramatic impact on the lives of disadvantaged individuals. If social inclusion and deprivation is alleviated then it would allow for increased opportunities for digital engagement which results in personal empowerment. This enables individuals to become active participants in society and would have a lasting impact on political and economic development (Weidmann, Benitez-Baleato, Hunziker, Glatz & Dimitropoulos, 2016). Digital technology and the internet have the capacity to improve social processes and foster a culture of inclusion and opportunity only so long as State and Federal Governments acknowledge that ubiquitous technology is not in itself the solution to social disadvantage (Weidmann, Benitez-Baleato, Hunziker, Glatz & Dimitropoulos, 2016). Digital engagement is one aspect of a much larger societal problem that needs to be viewed from a broader standpoint and informed by the experiences of the individuals who are most affected. Australia and more specifically for this report, Queensland, need to ensure that government departments, the education system, the commercial sector, public services, and informal education institutions such as public libraries are working towards a shared goal and are unified

by the creation of more effective public policy that will position this nation to meet the challenges of a digital future (Deloitte Access Economics, 2015).

In saying this though, the onus is not on Governments alone to make a difference; these industries must also take responsibility for their own future and contribute to the development of our modern, digital society. In the case of libraries specifically, there is a need to become increasingly innovative and adaptable in practice but more importantly public libraries must take more initiative in terms of advocacy if they are to secure the funding needed to remain as a bastion of information, education and training (Thompson, Jaeger, Taylor, Subramaniam & Bertot, 2014). Libraries have long suffered from an inability to clearly articulate the role that they play in society and substantiate the multitude of ways in which they contribute to social inclusion, cohesion and advancement. Thankfully, this has begun to change and with it, progressive libraries have increasingly provided a space for local communities that spans both the digital and physical worlds and empowers individuals to create, develop and exchange cultural, social and economic value (Mertens, Dahlke, Bennett & Briggs, 2016).

13. Conclusions

This research project has contributed to the current understanding of the role that Queensland public libraries play in bridging the digital divide and the impact that current programs and services have on levels of digital inclusion across the region. The aims and objectives of these digital services have been examined in conjunction with industry publications, State Library documentation and existing government policy in an attempt to highlight the gaps that exist in current practice and policy. This report has indicated that digital disadvantage directly limits political engagement and social participation; impacts upon levels of access to information and restricts individuals and communities from become active participants in society. In order for this persistent inequity to be resolved, all levels of Australian government must recognise the role that public libraries play in bridging the digital divide and acknowledge that as a key player in the necessary solution to social and digital disadvantage, this vital service requires funding and support that are equal to the positive impacts that libraries are able to make in society. This research has shown that libraries that are able to effectively demonstrate their relevance find it easier to secure funding and are therefore able to renovate spaces, develop more extensive programs and provide a greater wealth of services. These successful programs provide further data for quantitative analysis that highlights the transformative impact that public libraries have in communities and allows them to more clearly articulate the role they play in society.

This report has shown the digital divide to be a problem that is greater than simply a lack of access to information and communication technologies but is instead a pervasive social issue, intrinsically linked to existing socioeconomic disadvantage. Any solution to this problem will therefore require a multi-faceted approach that appeals to both the social and digital aspects of this divide. Public libraries have been shown to be uniquely positioned to respond to this dilemma due to the fact that they are both a cultural institution that fosters a culture of community engagement, inclusivity and personal empowerment whilst also being a leader in the informal education sector by providing access and training, promoting lifelong learning and opportunities for self-development. Public libraries in Queensland provide access to information technology and education as part of a service that is deeply rooted in personal interaction and individual experience.

14. Recommendations

This report has shown that if public libraries in Queensland wish to influence levels of government funding, support and future policy they must play a more active role in their own advocacy by contributing to a body of evidence that conforms to current impact analysis standards. The impact that public libraries have on local communities and the role they play in bridging both the social and digital divides must continue to be substantiated and updated. This will provide an overwhelming body of evidence that can be drawn on to more clearly articulate the need for greater funding and support. This evidence can also be used to inform the creation of future government policy and state-wide digital initiatives that are currently lacking a local perspective and community focus. If libraries are to continue to be relied upon in the delivery of state and federal digital agendas then it is vital that a strong case is made for increased funding. Public libraries should not be committing themselves to a culture of attempting to 'do more with less' or that will become the standard that is expected by the government. Rather, public libraries should be showing what is capable with limited resources and using that evidence to extrapolate potential outcomes and further the argument of what could be achieved with more government assistance.

It may be challenging though to secure such support from a government that cut funding in the first place and was reticent to acknowledge the positive impacts that libraries have on communities. Public libraries may then be better off pursuing alternative support through mutually beneficial partnerships with local and commercial industries or by securing funding that

is not strictly intended for libraries such as arts or history grants. In doing so, libraries would be able to secure the funding needed to develop programs and services that could more effectively validate the innovative role that these services play in society. It has been shown that libraries that are able to provide demonstrative evidence of positive impacts in communities will secure future funding from government more easily. Perhaps the best option for public libraries then is to improve programs and services through alternative funding options, the outcomes of which can then be used to more effectively demonstrate societal impacts which can in turn be used to petition government departments for changes in funding and policy.

The way in which government departments view public libraries and their potential to influence societal change must be transformed through irrefutable, demonstrative evidence. In summary, this report recommends the following steps be taken if the pervasive social and digital inequity facing disadvantaged Queenslanders is to be overcome.

- Pursue alternative funding sources and local commercial partnerships for public libraries
- Use this funding to improve and develop available programs and services
- Complete research and data analysis on the outcomes of these initiatives by using accepted standards and measurement processes
- Petition for more inclusive digital policy that reflects the needs of all Australians equally and takes into account the mounting evidence that confirms links between entrenched disadvantage and the socioeconomic circumstances faced by communities in particular geographical regions.
- Use this evidence to develop a demonstrative case for improved funding and support from all tiers of government

References

1. ACOSS (2016). Staying connected: the impact of digital exclusion on people living on low-incomes and the community organisations that support them. Retrieved from: <http://www.acoss.org.au/wp-content/uploads/2016/01/Digital-Divide-Policy-Snapshot-2016-Final.pdf>
2. AlphaBeta (2015). The new work order: ensuring young Australians have skills and experience for the jobs of the future, not the past. Foundation for Young Australians (FYA). Retrieved from: <http://www.fya.org.au/wp-content/uploads/2015/08/fya-future-of-work-report-final-lr.pdf>
3. American Library Association & Information Policy and Access Centre (2013). What is digital inclusion. Retrieved 16 August, 2016 from: <http://digitalinclusion.umd.edu/content/what-digital-inclusion>
4. Australian Bureau of Statistics (2016). Household Use of Information Technology, Australia, 2014-15. Retrieved August 8, 2016 from: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyReleaseDate/ACC2D18CC958BC7BCA2568A9001393AE?OpenDocument>
5. Australian Library and Information Association (ALIA) (2016). Public Libraries: Australian Public Library Alliance. Retrieved August 8, 2016 from <https://www.alia.org.au/node/184/public-libraries>
6. Burke, J. J. (2013). *The Neal-Schuman Library Technology Companion: A Basic Guide for Library Staff*. np.: American Library Association.
7. Curtin, J. (2001). A digital divide in rural and regional Australia. Current Issues Brief (1). Department of the Parliamentary Library. *Information and Research Services: Canberra*. Retrieved from: http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/CIB/cib0102/02CIB01
8. Digital Access Economics (2015). Australia's Digital Pulse: Key Challenges for Our Nation-Digital Skills, Jobs and Education. *Australian Computer Society*. Retrieved from: http://www.acs.org.au/_data/assets/pdf_file/0006/69720/02062015-Australias-Digital-Pulse-FINAL.PDF
9. Ewing, S. (2016, Feb 23). Australia's digital divide is narrowing, but getting deeper. *The Conversation*. Retrieved from <http://theconversation.com/australias-digital-divide-is-narrowing-but-getting-deeper-55232>
10. Hernon, P., & Matthews, J. R. (2013). *Reflecting on the future of academic and public libraries*. American Library Association.

11. Information Policy and Access Centre (2014). Public Libraries and Digital Inclusion. Retrieved 16 August, 2016 from:
<http://digitalinclusion.umd.edu/sites/default/files/DigitalInclusionBrief2015.pdf>
12. Infoxchange (2016). Go Digi: Digital Inclusion Manifesto. Retrieved on August 8, 2016, from
<https://www.godigi.org.au/blog/digital-inclusion-manifesto-feedback>
13. Jaeger, P., Bertot, J., Thompson, K., Katz, S., & DeCoster, E. (2012). The intersection of public policy and public access: Digital divides, digital literacy, digital inclusion, and public libraries. *Public Library Quarterly*, 31(1), 1-20. Retrieved from: <http://www.tandfonline.com.ezp01.library.qut.edu.au/doi/full/10.1080/01616846.2012.654728?scroll=top&needAccess=true>
14. Mariën, I., & A. Prodnik, J. (2014). Digital inclusion and user (dis) empowerment: A critical perspective. *Info : the Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media*, 16(6), 35-47. Retrieved from:
<http://search.proquest.com.ezp01.library.qut.edu.au/lisa/docview/1660152406/fulltextPDF/11664AC96D9646B8PQ/9?accountid=13380>
15. Marx, A. (2016, Aug 12). Too poor to afford the internet. *The New York Times*. Retrieved from http://www.nytimes.com/2016/08/12/opinion/too-poor-to-afford-the-internet.html?_r=2
16. McMenemy, D. (2009). *The public library*. London: Facet Publishing.
17. McShane, I. (2011). Public libraries, digital literacy and participatory culture. *Discourse: Studies in the cultural politics of education*, 32(3), 383-397. Retrieved from: <http://www.tandfonline.com.ezp01.library.qut.edu.au/doi/full/10.1080/01596306.2011.573254?scroll=top&needAccess=true>
18. Mertens, W., Dahlke, A., Bennett, S., & Briggs, A. (2016). Advancing Queensland's Public Libraries: A Research Report for State Library of Queensland. Queensland University of Technology. Retrieved from:
http://www.plconnect.slq.qld.gov.au/_data/assets/pdf_file/0012/343002/SLQ_Report_final.pdf
19. Migliorino, P. (2011). Digital technologies can unite but also divide: CALD communities in the digital age. *Australasian Public Libraries and Information Services*, 24(3), 107. Retrieved from:
<http://search.proquest.com.ezp01.library.qut.edu.au/lisa/docview/912678310/11664AC96D9646B8PQ/3?accountid=13380>
20. Newman, L. & Gurstein, M. (2016). Goodbye Digital Divide, Hello Digital Equity. Retrieved from:
http://apo.org.au/files/Resource/newman_gurstein_2016_goodbye_digital_divide_gavin_m_ooney_finalist.pdf
21. OECD (2001). Understanding the Digital Divide. Retrieved from:
<https://www.oecd.org/sti/1888451.pdf>

22. Queensland Government (n.d). Advance Queensland. Retrieved August 8, 2016, from <http://advance.qld.gov.au/our-vision.aspx>
23. Queensland Government, Department of Education and Training (2014). *Digital Strategy 2014-17*. Retrieved August 12, 2016, from: <http://deta.qld.gov.au/publications/strategic/other/digital-strategy-2014-17.html>
24. Queensland Public Library Association. (2014). Queensland Public Library Association - About Us. Retrieved August 8, 2016 from <http://qpla.asn.au/about-us>
25. SGS Economics and Planning (2012). *The Library Dividend: Summary Report*. Brisbane, QLD: State Library of Queensland.
26. SGS Economics and Planning (2012). *The Library Dividend: Technical Report*. Brisbane, QLD: State Library of Queensland.
27. State Library of Queensland (2013). *The Next Horizon: Vision 2017 for Queensland Public Libraries* [Brochure]. Brisbane, QLD: State Library of Queensland.
28. State Library of Queensland (2013). *Vision 2017 Learning Strategy* [Brochure]. Brisbane, QLD: State Library of Queensland.
29. State Library of Queensland (2014). *Libraries for Literacy - Every day, Every way: 2015-2018* [Brochure]. Brisbane, QLD: State Library of Queensland.
30. State Library of Queensland (2014). *Stretch Reconciliation Action Plan 2015-18* [Brochure]. Brisbane, QLD: State Library of Queensland.
31. State Library of Queensland (2015). *Disability Action Plan 2016* [Brochure]. Brisbane, QLD: State Library of Queensland.
32. State Library of Queensland (2015). *Multicultural Engagement Framework 2014-17* [Brochure]. Brisbane, QLD: State Library of Queensland.
33. State Library of Queensland. (2015). Opal Program. Retrieved August 8, 2016 from <http://plconnect.slq.qld.gov.au/manage/funding-and-grants/opal-program>
34. State of Queensland, Department of Science, Information Technology and Innovation (2013). *Queensland Government ICT Strategy 2013-17*. Retrieved August 12, 2016, from: <https://www.qld.gov.au/dsiti/assets/documents/ict-strategy.pdf>
35. State of Queensland, Department of Science, Information Technology and Innovation (2016). *Queensland Government ICT Modernisation Plan*. Retrieved August 12, 2016, from: <https://www.qld.gov.au/dsiti/assets/documents/ict-strategy.pdf>
36. Telstra (2016). Australian Digital Inclusion Index. Retrieved on August 8, 2016, from <http://digitalinclusionindex.org.au/the-index-report/about-the-index/>

37. Thompson, K., Jaeger, P., Taylor, N., Subramaniam, M., & Bertot, J. (2014). Digital literacy and digital inclusion: Information policy and the public library. Rowman & Littlefield.
Retrieved from:
<http://ebookcentral.proquest.com.ezp01.library.qut.edu.au/lib/qut/detail.action?docID=1776245>
38. Vinson, T., Rawsthorne, M., Beavis, A., & Ericson, M. (2015). Dropping off the Edge 2015.
Retrieved August 8, 2016 from <http://dote.org.au/about/>
39. Weidmann, N., Benitez-Baleato, S., Hunziker, P., Glatz, E., & Dimitropoulos, X. (2016). Digital discrimination: Political bias in internet service provision across ethnic groups. *Science*. pp. 1151-1155. Retrieved from:
<http://science.sciencemag.org.ezp01.library.qut.edu.au/content/353/6304/1151.full>
40. West, J. C. (2011). *Without a Net: Librarians Bridging the Digital Divide*. Santa Barbara, CA: Libraries Unlimited.
41. Wyatt, D., McQuire, S., & Butt, D. (2015). Public Libraries in a Digital Culture. University of Melbourne. Retrieved from:
http://arts.unimelb.edu.au/_data/assets/pdf_file/0005/1867865/PublicLibrariesinaDigitalCulture.pdf