

Mining The Massachusetts School Library Study, 2018: Extracting Evidence for Equitable Access to School Library Resources and Services

By Dr Carol A. Gordon

Equitable access to school libraries can facilitate digital equity just as digital equity results in equitable access and meaningful use in school libraries. The synergistic relationship of digital equity, inclusive access, and meaningful use of information and technology is unique to libraries. In the case of school libraries, teacher-librarians have the opportunity, means and expertise to improve access to digital information and technology that will lead to a culture of meaningful use in their school community, and eventually in their greater community.

How can the Massachusetts study inform the efforts of teacher-librarians to make instruction in their school libraries accessible to more students? Table 1 (below) displays an inventory developed from the online survey used in the study.

Equitable access to school libraries can facilitate digital equity . . .

Reclaiming Digital Equity

The digital equity issue has been called the 'civil right' issue of our time (Gordon, 2017). A recent Australian report considers lack of internet access is a socioeconomic factor, along with unemployment, lack of social engagement of young adults, low Year 9 reading levels, disability support, prison admissions, and domestic violence: ". . . Do those proposing that everything move online genuinely believe that there are no longer people who aren't online?" (Newman & Gurstein, 2016).

In the previous issue of *Synergy* (Volume 15, No. 2), the article 'Assessing Access in School Libraries: Developing Meaningful Use of Library Resources and Services' (Gordon, 2017) discusses the implications of digital equity for school libraries. Included in this article is an inventory for teacher-librarians to assess equitable access of their school library resources and services. The inventory consists of questions adapted from [The Massachusetts School Library Study: Equity and Access for Students in the Commonwealth](#) (Gordon & Cicchetti, 2018) which is now available online and can be downloaded from the hyperlink provided here.

The digital equity issue has been called the 'civil right' issue of our time.

This article presents selected data and findings from the Massachusetts study. While U.S. governance of education, particularly funding school libraries, is different from those in Australia and many other countries, the treatment of selected data and findings from the Massachusetts study can help teacher-librarians to use this study to adapt the research methods presented in this article to conduct their own action research. The study goes beyond determining the size of library collections, staff, or digital devices to measure how accessible school library resources and services are across three district types, urban, rural, and suburban. The selected data discussed here provide a model for analysing and interpreting data that can help teacher-librarians improve access to their school library resources and services for all children, educators, and parents in their school communities regardless of socioeconomic demographics.

Recovering the School Library Tradition in Massachusetts

School libraries in the United States were few in number and their book collections were small in 1837 when the Massachusetts legislature established 'common-school libraries' funded by school districts' self-imposed taxes. These funds targeted the purchase of 'apparatus', or resources to supplement public school instruction. Horace Mann, Board of Education Secretary, endorsed this legislation. "The provision about (common-school)

libraries might seem trifling, yet (Horace Mann) considered it as hardly second in importance to any passed since the act of 1647 which created the common schools of the state." (Note: these were the first public schools in the U.S.).

In his first report Mann points out the deficiencies of school resources and the potential to build resources through the establishment of common-school libraries. Mann was disappointed that school districts did not take advantage of the 1837 law (O'Connell 1934, p. 12), however, he was able to sell the idea of the common-school library by administering the first statewide school library survey.

The survey data documented the number of school libraries, the size and nature of their collections, and the number of people who had access to them. Mann noted, "What strikes us with amazement, in looking at these facts, is the inequity with which the means of knowledge are spread over the surface of the State – a few deep, capacious reservoirs surrounded by broad wastes. It has long been a common remark that many persons read too much; but here we have proof, how many thousands read too little. For the poor man and the laboring man, the art of printing seems hardly yet to have been discovered." (O'Connell, 1934, p. 19).

Motivated by the persistent lack of adequate and equitable school library resources and services, the Massachusetts School Library Association (MLA) has actively lobbied the state legislature to build support for school libraries for several decades. As a result, the Massachusetts legislature established the Special Commission on School Library Services in July 2013, 176 years after the tax legislation for common-school libraries. The Commission included school librarians, state library providers of subsidised resources, teachers, a Department of Elementary and Secondary Education representative, and legislators who sponsored the bill that created the Commission. The Commission's charge was to study the status of school libraries using the following indicators:

1. School library spaces;
2. Staffing;
3. Information resources;
4. Information technology;
5. Instructional time; and
6. Funding.

The Commission voted to go beyond this charge to document and analyse access of urban, rural and suburban school libraries to the indicators in order to determine and measure where inequities in access occur. These six indicators are referred to as school library access indicators.

Drilling for Inequitable Access

This section uses three tables to present two of the six school library access indicators from the Massachusetts study – access to school librarians and access to information resources. A table for each of these indicators contains selected data and findings derived from the school librarians' responses to survey questions. Most important is the discussion and interpretation of these the data and findings that can support the efforts of teacher-librarians to construct their own surveys to collect data and findings of their own school libraries' access indicators and to build their interpretation and understanding of the problems and causes of inequities.

Access to School Librarians

Table 1 displays the data points (Column 1), or what we need to know about school librarians to determine their accessibility. These data points guided the construction of survey questions for the Massachusetts study. Column 2 presents selected findings from the analysis of quantitative data (i.e., percentages and statistical measures of status and access) and qualitative data (comments written by survey respondents). Below the table is discussion and interpretation of the findings that indicate actions that teacher-librarians can take to improve accessibility. As you read through these discussions you will notice a 'story' unfolding that identifies problems of access and interpretations of data to explain and understand the problem. This storyline leads to possible solutions.

Table 1. Summary of Data Points Findings for Improving Access to School Librarians

1. Data Points: **2. Findings:** What Did We Learn?

What Do We Need
to About School
Librarians?

a. Licensed and Non-Licensed School Librarian Positions	80.4% of respondents are licensed school librarians holding professional (63.5%) or initial (16.9%) licenses with a ratio of about seven professional licenses to every one initial license. There were no statistically significant differences in number of professionally licensed school librarians among urban, rural, and suburban school libraries, This means that about 20 percent, or one in five school libraries, regardless of whether they are rural, urban, and suburban libraries, do not have professionally licensed school librarians.
b. Total Full-time Support Staff Length of Current School Library Positions	61% of school libraries have no full-time equivalent support staff. The largest number of FTE (full time) employees who work in the school library is 1.0 (one full-time equivalent) staff member in only 17.6% of school libraries. The results of a Chi-square analysis determined there were no significant differences in the number of FTE support staff among urban, rural, and suburban libraries. This means that regardless of district type only 17.6% have full time support staff.
c. Length of School Librarians in their Current Positions	70.2% of respondents are in their current positions for less than a year to 10 years. In this group there are twice as many librarians with five years or less. This indicates a disproportionate number of school librarians are beginning their careers or are new to their schools. Only 24.8% of school librarians are mid-career.
d. School Librarians Returning	84.3% of respondents indicated they were returning to their current school library positions for the 2016-2017. A total of 15.9%, or 78 school librarians are either unsure or not returning. Respondents who were not returning or who were unsure totaled 15.15%, or 79 respondents.
e. Reasons for School Librarians Not Returning	Of the 78 school librarians not returning, 34% identified job insecurity, i.e., the uncertain fiscal climate and the elimination of their jobs. In addition, 14.2%% of school librarians who are not returning identified career-related reasons.

Discussion of Findings on Access to School Librarians

Table 1 reveals some interesting explanations about access to school librarians. Finding 1a shows that a finding of ‘no significant difference’ does not necessarily mean that access to school librarians across district types is good. Finding 2b shows that almost two-thirds of school librarians have no full-time support staff.

Statistical analysis shows that the lack of a significant difference among district types indicates that regardless of their district type school librarians face challenges in compensating for lack of adequate support staff as they perform non-professional job functions at the expense of performing their instructional and professional development services for students and faculty, including curricular planning, development, and collaboration as well as collection development. This explains why school librarians report that they often perform non-professional tasks, such as checking out or shelving books, monitoring student attendance, or physically processing and preparing books for shelving and circulation.

... school librarians report that they often perform non-professional tasks ...

Finding 2c shows that 70.2% of school librarians are in their current positions for less than 10 years. This is important because mid-career employees tend to be productive and innovative workers who sustain a high level of expertise as well as a high level of commitment and involvement in their jobs (Hall, 2002). Another factor is the high rate of retirement in recent years accounts for less than 4.6% of late career school librarians who have been in their current position for 21 to 31+ years. Retirement of school librarians accounts for the high number of early career librarians. The preponderance of early career librarians indicates a workforce in need of extensive training and mentoring.

Finding 2d shows that 84.3% of respondents indicated they were returning to their current school library positions for the 2016-2017 and a total of 15.9% or 78 school librarians are either unsure or not returning. These findings are a red flag that there is a problem with maintaining a stable workforce of school librarians.

Finding 2e shows results from an open-ended question in the survey that gave school librarians opportunity to add additional information to help researchers understand why the school library workforce is unstable. About one-third of school librarians are not returning to their jobs because of job insecurity, which includes elimination of their positions. Here are some of their comments that help us understand the high incidence of job insecurity:

About one-third of school librarians are not returning to their jobs because of job insecurity ...

Graduating with a Masters in Library Science and state certification, (my) school does not have budget for licensed librarian so I am looking for a position elsewhere.

I have not been given a contract to sign yet.

Recently licensed as school librarian, waiting on posting for school library position for FY16-17.

Unsure about position availability.

Unsure of position due to it changes yearly.

These comments indicate a problem with timeframes for the allocation of funding to school districts that enables the timely hiring of school staff. Comments also imply that school librarians do not enjoy the same level of job security as other educators in their schools since it is common practice to cut school library staff rather than classroom teachers.

Access to Information Resources

Data points for assessing access to the library 'collection' in print formats is easily determined by counting physical items such as the number of catalogued print materials, added print materials in a given year, and alternative reading materials such as newspapers, magazines, and graphic novels for struggling and reluctant readers. On the other hand, measuring electronic access of items in electronic databases (when usage statistics are not available), and items downloaded through video-streaming, such as video games, is more challenging when data are collected through a survey, as was done in the Massachusetts study. In this section patterns emerge from the data that indicate what kinds of actions can be taken to improve access to both print and electronic information resources.

Table 2 summarises the data points and findings for accessing school library print and non-print materials and the tools for accessing them. Since there is a lot of data in this table the discussion interpretation of findings are integrated within each section and are indicated in bolded italics for each of the data points: Print materials; Tools for Accessing to Print Materials; Non-Print Materials; Tools for Accessing Non-Print.

Table 2. Summary of Data Points and Findings for Improving Access to Information Resources

Note: Discussion and interpretation are included in the table and appear in bold italics.

1. Data Points:

Learn?

What Do We Need

to Know About

Access to Information

Resources?

2. Findings: What Did We

	Print Materials
a. Catalogued print materials	<p>47.1% of school libraries have 10,001 to 20,000 books and almost one-third (30.9% of libraries) report between 5,001 and 10,000 books. Combining these numbers, we can determine that 78% of school libraries have catalogued print collections that range from 5,000 to 20,000 items. A statistical analysis of the size of print collections across district types shows no significant difference in the number of catalogued print materials in urban, rural, and suburban districts.</p> <p><i>It is likely that suburban school libraries are decreasing their print collections as they acquire e-books, e-reference materials, and e-journals while underfunded libraries are retaining their books and print magazines.</i></p>
b. Added print materials	<p>73.3% of respondents added 400 materials or fewer print materials to their collections for one school year. This chart shows an uneven distribution of added materials to the library collections. Comparison of school libraries' added materials shows using an Anova test showed no significant difference in the number of print materials added to school libraries in urban, rural, and suburban districts. Given the overall low rate of added materials for replacement and new books, this finding is interpreted as a low acquisition rate of new print materials across school libraries regardless of district type.</p>
c. Alternative reading materials	<p>An ANOVA test showed a statistically significant difference between urban and rural districts with regard to the number of alternative reading materials (newspapers, low level reading materials, magazines, graphic novels, easy reading adapted from age appropriate sources, and new digital genres such as fan fiction). Another test showed urban school libraries have significantly fewer alternative reading materials than rural libraries. These materials are critical for developing reading comprehension through sustained and focused reading.</p>

Tools for Access to Print Materials

d. Interlibrary loan

Over two-thirds (67.9%) of school libraries do not participate in interlibrary loan. When asked the means by which their interlibrary loan systems operated 69.1% of respondents chose 'not applicable.'

Comparison of interlibrary loan by district types shows there were no significant differences in interlibrary loan among urban, rural, and suburban school libraries. Given the low participation rate in Interlibrary Loan we can conclude participation in interlibrary loan is low regardless of district type.

This finding indicates underuse of shared resources.

e. Electronic remote access to library catalogs

88.9% of respondents reported their school communities have electronic access to print and digital resources and help through the library website. Findings show that despite the high percentage of school libraries with electronic, remote access to library catalogues, urban and rural school libraries have significantly less remote access to their library catalogs than suburban school libraries.

This means that among the school community (i.e., students, parents, teachers, school administrators) there are inequities of access to library materials. Most suburban school library users can access the library catalog and library resources 24/7 while most urban and rural library users cannot. In addition, access is already restricted by statistically significant numbers of days urban libraries are closed compared with suburban school libraries.

f. Automated circulation systems

93.28% of respondents have automated circulation systems in their libraries to access print and digital collections. A Chi-square analysis that found no significant difference among urban, rural, and suburban school libraries with regard to automated circulation systems.

This finding underscores the importance of digital access outside of school as well as within the school day. It is not possible to provide equitable access without ensuring access to the internet at home.

Non-Print Materials

g. E-books

Respondents approximated the number of e-books available in their libraries through subscriptions. Almost 39.7% of school libraries do not subscribe to e-books. An Anova test shows there are no significant differences among urban, rural, and suburban school libraries with regard to the number of e-book subscriptions. Given the slow adoption of e-

books this finding is interpreted as a low rate of e-book adoption across district types.

The adoption of e-books in school libraries, and in libraries in general, has been slow for several reasons, including cost, information technology requirements, the propensity and need of younger children and struggling readers for print books, and the need for readers to engage in sustained reading in print, which is critical to improving comprehension (Wigfield & Guthrie, 1997).

Research shows that people are more likely to engage in sustained and deep reading (which improves comprehension) in print environments but prefer to skim and scan digital text (Rowlands, et al., 2008). Struggling and reluctant readers need more access to print but they also need to develop digital literacy in e-texts.

h. Non-streamed) media

DVDs in Library Collections. 31.3% of school libraries have zero to 10 DVDs and 21.7% of libraries have 101 or more DVDs. Comparison of DVD collections by district types shows no significant difference in the size of library DVD collections among urban, rural, and suburban school libraries.

Videocassettes in Library Collections shows more than half of school libraries (51.6%) have zero to ten videocassettes and 16.1% have 100 or more. Comparison of videocassette collections by district types shows there are no significant differences in the number of videocassettes among urban, rural, suburban school libraries.

CDs in Library Collections shows that 57.6 % of school libraries have zero to ten CDs. there are no significant differences in the number of videocassettes among urban, rural, suburban school libraries.

Audiocassettes in Library Collections shows that almost three-quarters (73.5%) of school libraries have zero to ten audiocassettes while small numbers of libraries have larger collections. Statistical analysis shows no significant differences among rural, urban, and suburban school libraries regarding their analog holdings.

A comparison of the percentages of analog A-V materials in library collections shown below indicates there is a strong trend toward smaller collections of 0-10 items.

Analog AV Materials	No. of Items	Percentage of Libraries reporting
----------------------------	---------------------	--

Items

DVDs	0-10	31.3%
Videocassettes	0-10	51.6%
CDs	0-10	57.6%
Audiocassettes	0-10	73.5%

These findings also raise the question of how underfunded libraries are compensating for smaller analog collections when they do not have the technological infrastructure, which is strongly indicated by data on bandwidth and access to the internet and computers across district types in the Information Technology section of the study.

i. Video-streamed media

Almost one-third of school libraries (30.5%) have digital video streaming 68.1% do not. Comparison of video streaming by district types shows that significantly fewer rural school libraries have statistically less access to paid subscription video streaming service than suburban and urban libraries.

Rural school libraries do not have the capacity to adopt video-streaming yet they are divesting analog materials from their collections. Analyses across analog devices and digital video streaming strongly indicate that rural school libraries reporting small analog collections are weeding these outdated technologies out of their collections even though they do not have the technological capacity to access digital materials through video-streaming subscriptions.

j. Subsidised subscription databases

Subscriptions. About 75.2% of respondents subscribe to Gale Cengage. 73.3% subscribe to *Encyclopedia Britannica* and almost half (49.7%) subscribe to the *Boston Globe* in the *Pro Quest* database. **Respondents were enthusiastic about having no-charge access to electronic content in subscription state-supported databases. They wrote:**

‘Keep supplying great databases.’

‘Access to databases such as ABC-CLIO, Proquest, EBSCO would be the most effective ways to deliver the same content throughout all

schools in the Commonwealth at reduced or no cost (for school libraries.)’

When respondents were asked, ‘How can school libraries provide resources in an equitable manner that is cost-effective?’ they typically wrote: ‘Good question! The state-funded databases are an excellent start.’

However, respondents indicated state-funded electronic content collections are freely available only to schools that meet specific criteria. For example, school libraries must have licensed school librarians to qualify for state-supported databases and e-books. In addition, electronic access to articles in journals, newspapers, and reference books can be equitably available as long as ALL schools have the technological infrastructure and bandwidth to have access to these databases.

65.8% of respondents reported that the state-funded electronic resources are used in their school’s curriculum on a regular basis. Only 16.5% of respondents said the electronic resources were not used in the curriculum. However, the ‘Not sure’ response of 15.7% of respondents indicates that either the librarians are not using these resources in their libraries and/or they are not sure whether teachers are using these resources in their teaching.

For those respondents who have linked the electronic resources on their webpages, for example, it is possible that teachers and students are accessing these resources in the classroom and/or at home.

32.2% of school librarians responded ‘No’ and ‘Not sure’ that electronic resources were used in the school’s curriculum while 65.8% report that they do use electronic to support curriculum.

Significantly fewer rural libraries regularly use state-funded electronic resources in the curriculum than suburban libraries. There is no significant difference between urban and suburban libraries’ use of state-funded electronic resources in the curriculum.

Since average use of state-funded electronic resources is 65.8% across districts it is evident that use of state-funded databases in the curriculum could be improved across district types.

Massachusetts Library System. 81% of respondents reported that their school libraries have membership in Massachusetts Library System which gives them access to databases at no cost. There were no significant differences in memberships in the MA Library System between rural school libraries and urban school libraries or between urban and suburban libraries. However suburban school libraries have significantly more memberships in MA Library System than rural libraries.

In order for a school library to join MLS it must have a strategic plan. All libraries can also apply for federally funded grants through the Massachusetts Board of Library Commissioners. A certified school librarian is an asset that enables the judicious, maximum use of digital technology to develop and support access to print and electronic resources in the school library collection, staffing and school library help and instruction, and funding from federal grants and programs, and private foundations. These findings will indicate the needs that are not yet met and IT solutions to meet those needs in a cost-effective, equitable manner.

Commonwealth e-books. 71% of respondents reported that they did not participate in the Commonwealth e-Book Collection. The Commonwealth eBook Collections program offers a catalogue to search for eBooks and more from key vendors. Patrons can search for a book, check it out and download these materials to their devices. Significantly more rural school libraries participate in this service but significantly fewer urban and suburban school libraries participate.

The low participation rates in free and subsidised electronic resources exacerbates the digital divide when, in fact, 100 percent participation could eliminate the inequity of electronic resources. Barriers to this goal include lack of professional school library staffing and inadequate technology infrastructure to support the use of electronic resources in under-funded schools and districts.

Locally funded electronic collections. Respondents indicated how many locally funded electronic collections and databases their school libraries provide. These are collections paid for from local school budgets. Locally funded electronic collections and databases are purchased with allocated school library budgets or other funding sources administered by the principal. 45.7% of respondents purchase no electronic collections with their library budgets. 36.3% purchase one to four electronic collections. There were no significant differences in purchasing of electronic collections with local funds locally among urban, rural and suburban school libraries. This indicates that across district types it is generally the case that 45.7% of school libraries do use local funding to purchase electronic collections. *There is strong trend in the poor participation in shared and subsidised resources and an alarming low incidence of no access to electronic resources, particularly for rural school libraries.*

Tools for Access to Digital Materials

k. Adequate bandwidth

Almost two-thirds (64.5%) of school librarians report that bandwidth is adequate to support instruction in their libraries. A Chi-square analysis showed significant associations were found between district types and bandwidth. Significantly fewer urban school libraries have adequate

bandwidth than suburban school libraries. No significant difference was found between urban school libraries and rural school libraries.

As streaming video replaces analog audio-visual equipment it is imperative that schools are furnished with enough bandwidth to take full advantage of the investment schools are making in digital devices and software. On school district, county, and state levels a planned and coordinated approach to working with the communication industry and providers is essential to maintaining state-of-the-art technology.

l. Student access to internet

59.7% of respondents reported that 81-100% of their students could access the internet at any one time. 25.6% said that 41-81% of their students could do so. 59.7% of respondents said that 81 to 100% of students have internet access and 1.1% said that no students have access. Between that range it seems that access for almost 40% of students is poor. 25.6% of librarians said that 41-80% of students had access. 7.9% said that 1-40% of students had access.

m. Access to computers in school library

Almost one-quarter (24.2%) of school librarians reported that there were 41 or more computers available for students use. 44.6% reported 26-30 computers for students in the library. 3.1% reported that there are no computers in the school library for student use.

72.4% of respondents said their schools do not have a one-child-one-computer policy and 10.4% are actively planning to implement it. 16.3% of respondents report that they do have the policy. No significant difference was found between rural and suburban or between urban and suburban since. Since 72.4% reported no policy exists in their schools this result indicates the absence of a policy across district types.

There is disparity between the number of computers connected to the internet in and student access to the internet from computers in the library. From the school librarian's perspective, a high percentage of computers in a school connected to the internet is not the indicative of student access to those computers in the school library.

Sampling Evidence-based Recommendations for Equitable Access to School Library Resources and Services

Tables 1 and 2 indicate recommendations that can guide school librarians as they assess their school libraries' access to school library access indicators. Can they help you?

Improving Access to School Librarians

1. In Massachusetts, where there is local control of budget allocation and the hiring of school librarians, school administrators need professional development to understand the importance of equitable and essential access to school libraries for all K-12 children.

2. Full-time support staff for school libraries is critical for improving equitable access to school library resources and services. (In another part of the study data indicated that funding for school libraries on a per capita basis is needed to ensure that resources and services are adequate for and proportionate to student population.)

Full-time support staff for school libraries is critical for improving equitable access . . .

3. Job insecurity for current school librarians is damaging the school library profession as fewer students are joining the profession.

4. Information technology has the potential to provide equitable access to school librarians through the school library website.

Improving Access to School Library Resources

5. Access through digital technologies is critical in bridging the gap in access to school library resources and services.

6. School librarians may need professional development to maximise their use of information technology to provide equitable access, particularly in providing resources and services through the virtual school library. (In another part of the study data indicate that urban and rural school libraries have significantly less access to the school library website which provides access to the automated library catalog, electronic databases, e-books, tutorials, and contact with the school librarian for instruction and help).

7. Digital access from home is as important as access in school for leveling the playing field. (In another part of the study data strongly indicated that urban and rural school libraries have significantly less funding than suburban school libraries which directly affects access to information technology.)

Digital access from home is as important as access in school for leveling the playing field.

8. School libraries tend to under-subscribe to e-books and e-journals/subscription databases, even when they are subsidised or offered at no cost. Agencies that provide subsidised access to electronic materials should provide access regardless of the presence of a certified school librarian or a strategic school library plan. Through negotiations with school administrations these agents can be influential in raising the profile of school libraries and the importance of access to electronic reading materials.

9. Print collections are critical for improving reading comprehension, particularly for struggling and reluctant readers yet these non-book materials may not be sufficiently accessible in school libraries. (In another part of the study data indicated that the grade least served by school libraries is kindergarten. This affects reading readiness and emerging literacy for the youngest students.)

Print collections are critical for improving reading comprehension . . .

10. There is resistance to owning less and subscribing more to library materials through interlibrary loan and subscribed electronic resources.

11. Information Technology priorities must include partnerships with technology companies and other strategies to provide adequate bandwidth and technological infrastructure needed for video-streaming in all schools, particularly those in rural areas where internet access is more inadequate than in urban and suburban school libraries.

12. Students' need for access to digital devices on a one-to-one basis indicates that funding for information technology must give priority to this need so that all students have local and remote 24-7 access to school library resources and services.

References

- Gordon, C. A. & Cichetti, R. (2018) *The Massachusetts School Library Study: Equity and Access for Students in the Commonwealth*. Accessed 19 April 2018 at: <https://mbllc.state.ma.us/programs-and-support/youth-services/school-libraries-study.php>
- Gordon, C. A. (2017) 'Assessing Access in School Libraries: Developing Meaningful Use of Library Resources and Services' in *Synergy*, 15(2). Accessed 20 April 2018 at: <https://www.slav.vic.edu.au/synergy/volume-15-number-2-2017/research-into-practice/696-assessing-access-in-school-libraries-developing-meaningful-use-of-library-resources-and-services.html>
- Hall, D. T. (1986) *Career Development in Organisations*. San Francisco: Jossey-Bass.
- Newman, L. & Gurstein, M. (2016) 'Goodbye Digital Divide, Hello Digital Equity (and why we have to Go the Extra Mile to get it)' in *Regional and Rural Broadband (R2B2)*. Accessed 22 August 2017 at: <https://croakey.org/goodbye-digital-divide-hello-digital-equity-and-whywe-need-to-go-the-extra-mile-to-get-it/>
- O'Connell, J. J. (1934) *Horace Mann's Influence on School Libraries in Massachusetts*. Dissertation. University of Massachusetts Amherst MA Masters Thesis 1911. Retrieved on 12 October 2016 at: <http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=2982&context=theses>
- Rowlands, I. N. D., Williams, P., Huntington, P., & Fieldhouse, M. (2008) 'The Google Generation: The Information Behaviour of the Researcher of the Future' in *Aslib Proceedings: New Information Perspectives*. 60(4), 290-310. Retrieved on 14 September 2016 at: http://late-dpedago.urv.cat/site_media/papers/425.pdf
- Wigfield, A. & Guthrie, J. T. (1997) 'Relations of Children's Motivation for Reading to the Amount and Breadth of their Reading' in *Journal of Educational Psychology*, 89 (2), pp. 420-432.
- Dr Carol A. Gordon** is the Principal Consultant at Gordon & Associates Consulting. Dr Gordon was formerly Associate Professor, Library & Information Science at Rutgers – The State University of New Jersey, USA.