

Teacher-librarians as Champions of Digital Equity

By Dr Carol A. Gordon

Can children acquire:

... basic computing skills ... through incidental learning provided the learners are given access to a suitable computing facility, with entertaining and motivating content and some minimal (human) guidance? (Mitra, 2015).

In 1999 Dr. Sugata Mitra, scientist and educator, created the Hole-in-the-Wall to find out. The hole, located in Kalkaji, a slum in New Delhi, India, housed a freely accessible computer. Children who discovered it were able to learn how to use the computer on their own, providing positive evidence for Mitra's hypothesis. Another school of thought holds fast to the premise that technological competencies adequately prepare children for living and working in the digital age. Teacher-librarians know that a 21st century education is incomplete without information AND technology skills instruction.

With the growing importance of digital and information literacy, digital equity is a priority that ensures that there is not only equality, whereby every child receives the same opportunities, instruction, and help, but that there is equity whereby each child receives as much as she or he needs to acquire information and digital competencies. This means that disadvantaged children may need more opportunity, instruction or help. Before there can be equality there needs to be equity.

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Picture this:

- School library branches for every 50 students in your school, each staffed by a school librarian and two aides;
- Student tutors and trained teachers who can offer extra help for increased opportunities and instruction for disadvantaged students;
- Extended night, weekend, and summer library hours to increase access for those who need it;
- Generous, sustainable funding from the public and private sector for abundant, state-of-the art technology and high quality software;
- Information AND technology literate faculty who systematically work with their librarian to integrate information, technology, and critical thinking with academic learning standards for group and personalised learning;
- Compensatory, non-graded, hands-on teaching modules for students with low level information AND technology skills;
- Online and face-to-face teaching modules targeting core information AND technology competencies at every grade level;
- Innovative strategies such as extended 'laboratory' scheduling for sustained inquiry and information-based learning;
- Dedicated planning time for librarians and classroom teachers to collaboratively design, evaluate, and revise teaching;
- Work/internship programs that partner with local businesses to create workplaces within school and/or student internships in community workplaces;
- Digital equity for all students in terms of access to technology, high quality content; and instruction, support, and help.

Seems improbable? Maybe not, as digital and information literacy in this century is as important as reading and writing in the 20th century.

Why is Digital Equity Important?

Digital equity is the hot topic of conversation among researchers and practitioners in politics, education, sociology, economy, public health, and social science and its gaining momentum in the library world. In the 1990s the Digital Divide defined the gap of digital haves and have-nots with statistics on home access to the internet based on educational levels, income, ethnicity, age, and gender. As awareness of the causes and consequences of digital inequity grew, digital equity emerged as a social justice issue on a global scale.

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Technology has transformed all aspects of society, including the teaching-learning process. It is critical that specific groups within our society not be excluded from the benefits of these new developments. Not only must digital equity continue as a priority goal of all nations, but efforts to move toward digital equity also must be mobilised, focused, and coordinated to prevent the development of a permanent underclass in global society (Resta, 2011).

Research conducted during the last two decades applies digital equity to all aspects of living and working in the digital age. For example, digital equity research at Flinders University has the following goal:

To contribute to a healthy and fair global community, with a particular focus on Australia, by conducting high quality, policy-relevant research on the social and economic determinants of health, health equity and Aboriginal health and build capacity to conduct such research (Southgate Institute for Health, Society and Equity, 2016).

The research findings of the Southgate Institute inform practice and policy in Australia and overseas to promote mental and physical health equity and the reduction of social and economic inclusion. Digital equity research is connecting the dots between social and economic issues, between poverty and prosperity, in the context of an inter-connected global economy. Increased awareness has given rise to innumerable digital equity initiatives in private and public sectors around the globe. Here is a sampling of some of these initiatives.

Private Sector

- Corporations in the telecommunications field have committed billions of dollars to improve access to digital technology. In the U.S. Comcast has signed up 500,000 economically disadvantaged families for *Internet Essentials*, a program that offers internet access for \$10 per month and a purchase price of \$150 for a computer to economically disadvantaged families;

Business Sector and Government Collaborations

- Google and Comcast in the U.S. pledged their support for the federal Department of Housing and Urban Development ConnectHome program for economically disadvantaged households;
- In Australia the Community Technology Centres Association, Inc. was established in 2005 to assist Community Technology Centre members with business planning, growth, marketing and sustainability;
- CoSN works with the U.S. Federal Communications Commission, the White House Domestic Policy Council, and national stakeholder groups to ensure that districts continue to realise the benefits of E-rate, a government subsidy program that provides discounts to assist schools and libraries in the United States to obtain affordable telecommunications and Internet access.

National Governments

- The Digital Education Revolution, a major part of the Australian Government's Education Revolution, aims to contribute sustainable and meaningful change to teaching and learning in Australian schools that will prepare students for further education, training and to live and work in a digital world;
- Connect Ed, an Obama White House partnership with the private sector, donates licenses for digital products and supports information literacy instruction;
- U.S. Legislation is mandating financial support for digital equity projects such as the Community Re-Investment Act, requiring banks with branches in low-income neighborhoods to commit a percentage of their assets in the form of grants and low-income loans. The Act is expected to yield funding estimated at \$100 billion dollars for digital equity grants, loans and equity investments;
- Australian public libraries play an important role in providing access and training in the use of digital media through the state/territory and local government public library systems and assisting with the infrastructure and delivery of some government department programs;
- The Australian national-level grants program *Networking the Nation* provided the impetus for a number of state and territory programs addressing the disparities between metropolitan and rural/remote communities in accessing and using information and communication technologies (ICTs). *Networking the Nation* was completed in 2005 but its influence continues to be significant as it provided the seed funding and establishment capital for many of the current programs;
- The Australian Government's *Digital Education Revolution*, including the *National Secondary Schools Computer Fund*, has funded programs that ensure the education system continues to change and adapt in response to new and emerging technologies;
- The South Korean government took on a cyber home and school initiative eight years ago, resulting in broadband in the homes of 98 percent of their population.

State/City Initiatives

- South Australia and Victoria are part of an integrated statewide policy to create online opportunity and respond to changes brought about by information and communication technologies. In other states/territories, responsibilities for digital communications are spread across a range of agencies and programs reflecting various departmental/agency objectives;
- Boston is the second city in the U.S. to hire a full-time Digital Equity Advocate tasked with increasing use of Wicked Free WiFi;

- The Smart Chicago Collaborative is a civic organisation that improves people's lives through equity of access to digital skills and open access to data. Founded in 2011 by Chicago, the MacArthur Foundation and City Trust, the goal is to seek digital equity for urban, suburban, and rural digital deserts.

International Initiatives

- UNESCO (2016) has committed to a sustainable development goal that highlights the role of teachers and teacher educators in achieving inclusive, equitable, and quality education and lifelong learning for all.
- *IFLA School Library Guidelines*, Recommendation 6, states: 'School library legislation should be in place, at an appropriate governmental level or levels, to ensure that ethical responsibilities of all members of the school community are clearly defined, including such rights as equity of access, freedom of information and privacy, copyright and intellectual property, and children's right to know' (IFLA, 2015, p. 10).

It is evident that funding for digital equity is the single most important issue facing government, education, commerce, and libraries across the globe.

The Role of Teacher-Librarians in Digital Equity

Equity is a core value for teacher-librarians. Every library initiative is intended for maximum access. However, teacher-librarians cannot attain digital equity alone, nor do they have to, given the enormous response the issue is enjoying from all sectors at local, national, and international levels. Digital equity requires a collective effort that has collective impact because equity is a systemic issue that manifests differently across communities and nations. Inequity of access to technology and instruction originates in social, cultural, and economic conditions, so the problem requires collaboration of local to global players. Teacher-librarians are positioned to bring together funding and expertise from private and public sectors of their communities. A collective impact approach builds an infrastructure for finding solutions to digital inequity. It is more important than ever that the work of researchers and practitioners inform each other, and that teacher-librarians take a leadership role and a systematic approach to solving equity issues in their communities. A working paper from the 2013 International Digital Equity Summit provides guidance for the collective impact approach and illustrates why it is important for teacher-librarians to make digital equity a priority and suggests priorities.

If there is one ICT impact that policy makers and educational researchers are looking for, it is learning outcomes. In our own conceptualisation the issue of access must be addressed in the following five different areas for optimising the use of ICTs:

1. Access to hardware, software and connectivity to the Internet.
2. Access to meaningful, high quality, culturally relevant content in local languages.
3. Access to creating, sharing, and exchanging digital content.
4. Access to educators who know how to use digital tools and resources.
5. Access to high-quality research on the application of digital technologies to enhance learning. (Resta & Laferrière. 2013)

Teacher-librarians play an important role in each of these areas: connectivity, content, content creation, technological support, and research on digital technology and learning. However, the role of teacher-librarians in information education, which should be at the top of this list, is not there. The time for teacher-librarians to claim this territory is now as digital equity advocates acknowledge that boxes and wires do not guarantee intellectual access to digital content. The time is right to deliver the message that students do not automatically know how to find, evaluate, and use information when they learn technological skills.

How can teacher-librarians raise their profile and highlight their unique contribution to digital equity initiatives?

Talk, Write, and Read about Digital Equity

School library discourse is buried in the terminology of 21st century skills, digital citizenship, digital literacy, and information literacy in policy statements of library organisations, standards for learning, and library literature. While this terminology implies equity, it is not clear to our colleagues in educational and technology, and to the general public, that teacher-librarians are champions of equity who have a unique contribution to make – information education.

... teacher-librarians are champions of equity who have a unique contribution to make ...

Teacher-librarians are the only educators with the training and expertise to address both information AND technology competencies within the framework of national and state educational standards and curriculum. In many countries information literacy competencies are built into content standards.

However, the 'information' in 'information technology' does not receive equal time and attention. This has serious

consequences for funding and policy for school libraries, and for establishing their place in educating youth in the digital age.

Fortunately, explicit references to digital equity are emerging in school library literature and conference agenda. Most recently, Joyce Valenza writes, "Having a transformative school library is an issue of equity" (Valenza, 2016, p. 32). Hailley Fargo maintains the YALSA (Young Adult Library Services Association) Blog, Digital Equity Toolkit. SLAV's national conference in August 2015, Students at the Center of Learning: It's a Digital World, addressed the Melbourne Declaration's ICT goals requiring students to be ". . . creative and productive users of technology, especially ICT, as a foundation for success in all learning areas" (Ministerial Council, 2008, p. 8-9). The Declaration states, "Australian governments commit to working with all school sectors to: 'close the gap' for young Indigenous Australians – provide targeted support to disadvantaged students – focus on school improvement in low socioeconomic communities" (Ministerial Council, 2008, p. 15).

In the school library research arena the first study on digital equity in school libraries is in process in Massachusetts, USA. The School Library Commission formed by the state legislature is overseeing the study, which is supported by the Massachusetts Association of School Libraries (MSLA). The goal of the study is to establish a baseline of library capacity in terms of materials, technology, and instruction and a determination of equality and equity by comparing student access across the socio-economic range of schools, districts, and communities. Watch for the findings of this two-part study that will inform the following recommendations for teacher-librarians to lead digital equity initiatives within their schools and communities.

Think Globally; Act Locally

Teacher-librarians need to establish a strong, vocal presence in international, national and local digital equity initiatives, and particularly in their coalitions, collaborations and conferences. The International Society for Technology in Education, the National Collaborative for Digital Equity (U.S.), the Association for Advancement of Computing in Education (Ireland) and the Monash University, Faculty of Education Conference on Equity and Access in Australian Education, to mention a few, are opportunities to connect, share and collaborate.

In the United States, the National Collaborative for Digital Equity wants to ensure all families acquire essential tools and skills to use technology effectively. They have embraced intercultural education that validates local learning cultures and also crosses political and cultural borders to provide incentives for local teacher educators to participate in online communities of practice or knowledge building communities and create content (Hargittai & Walejko, 2008). The collaborative has also developed guiding principles that frame digital equity as a social justice issue. These principles recognise librarians as key players and are intended to inform the design and evaluation of digital equity initiatives for private and public sectors of their communities.

- Focus on locally determined economic, educational, and social impacts of digital equity;
- Provide equitable, a free or low-cost, access to the full array of essential resources for digital inclusion, lifelong learning, workforce development, and economic opportunity;
- Engage in culturally, linguistically and socioeconomically diverse local leaders who represent key stakeholder groups (e.g., municipal, educational and business leaders, libraries, health and workforce development agencies, affordable housing, and human services);
- Build capacity for the community's educators by providing professional development, strengthening PreK-12, adult, and teacher educators' efforts to develop their learners' digital literacy skills;
- Draw on librarians' leadership, expertise and resources by providing crucial guidance to learners to find, create, and use high-quality digital content and tools to meet their learning goals;
- Focus on the 'deeper learning' that information education brings to assist learners of all ages to develop the skills for lifelong learning and living wage career opportunity in the digital age;
- Draw on research on best known inclusive practices at every phase of the collective impact process, from defining priority concerns and identifying shared metrics to assess progress to selecting promising and proven strategies most likely to improve these metrics and continuously evaluate improvement in targeted metrics;
- Engage local leaders whose diversity reflects fully the community's linguistic, cultural, socioeconomic, racial, and ethnic diversity, so the social impact goals they set are firmly rooted in locally determined needs and assets;
- Focus on continuous improvement and generating knowledge—contributing new empirical knowledge on investment strategies most likely to yield significant digital equity as well as educational and economic opportunity outcomes.

These strategies require a collective impact process, a local approach to collaborating with stakeholders to attain digital equity. This entails developing consensus on a common agenda for community change, shared measures for success, mutually reinforcing activities, continuous communication, and a backbone organisation that reflects and respects the community's diversity and provides sustained governance for collaborative endeavors. Local action research that establishes a cycle of stating a problem, consulting the research, gathering evidence, and testing solutions ensures sustainability of digital equity initiatives that must be ongoing and continuous from one year to the next.

Teacher-librarians are well positioned to work these strategies into their work plans to become local community leaders, and into their conference agendas to raise awareness on state, national, and international levels. In so doing, teacher-librarians ensure a sustainable future for school libraries and a productive future for all children. If you can picture that, you can make it happen!

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