

[SLIDE 1]

Welcome from the Open Data Literacy project. We created this presentation to introduce libraries to opportunities for getting involved in open data.

Open Data Literacy (or, ODL) is an IMLS-funded initiative to advance open data through education and research, and to support librarians and information professionals in the public sector.

We hope you find this introduction interesting and useful.

[SLIDE 2]

As more and more data becomes available online for access and use by anyone, libraries are becoming active in this movement—the open data movement.

From the perspective of professional librarianship values, open data strongly aligns with the mission of libraries, especially in terms of our commitment to open access, information literacy, and civic engagement. For example, the library is already a hub for collection of government documents and for help with government processes such as citizenship and tax return preparation.

Similarly, libraries can curate and provide access to digital collections of open data that are of value to their communities. At the reference desk, they can direct people to open data collections suited to their questions. They can assist with data interpretation, contextualization, and application, such as for decision-making and problem-solving tasks.

Some libraries are cultivating strong relationships with branches of local government, advising on curation best practices, metadata, and selection of what data to make public, as well as in other areas. In this role, libraries can serve as a bridge between government transparency initiatives and actual citizen needs.

There are also internal benefits for libraries working with open data. For instance, libraries are publishing open data about their own operations that can be used for strategic planning, fundraising, and demonstrating their value to patrons. It can also be used comparatively with similar open data from other libraries.

As you make your data open, it raises awareness about your library and increases transparency, and progress in both of these areas is becoming increasingly important in many communities.

[SLIDE 3]

Now let's look further into three important areas where libraries are becoming more involved in open data. They are: library as educator, collaborator, and publisher.

Educating libraries engage in a variety of activities to educate the public about open data, and improve open data literacy. This can include open data workshops or hackathons, and other programming and educational initiatives that increase the community's awareness of and competence in open data.

Collaborating libraries work closely with their local governments to improve open data portals and open up more data in line with community interests. In this case, a librarian might sit on an open data advisory board, or perhaps, the library will host the open data portal on its servers. Every partnership looks slightly different, but the main idea is that the library works together with local government to make open data better for the public.

Publishing libraries are actively releasing open data about their library's operations to their local open data portal, and possibly on the library website as well.

[SLIDE 4]

First, we'll explore how libraries educate the public about open data.

Data literacy, and other forms of more tech-oriented digital literacy, have been a growing concern in libraries. Open data literacy and programming is a great next step, especially when it gives the public a chance to interact with a variety of tools, and hone multiple skills at once. It can support learning about information literacy, development of tech skills, and promote civic engagement, making it an all-around win for libraries.

One place to start with open data education is at the reference desk. In fact, your reference librarians might be doing this already. When reference librarians are knowledgeable about open data resources, they can help users find datasets—concrete evidence—to answer their questions or solve a problem.

Libraries are also becoming active in hosting open data events and programs, such as hackathons or data science classes. If your library has a makerspace, this can often be a great venue for open data activities, or you might consider adding software that aids open data exploration to the makerspace. These types of educational activities raise awareness of open data, and help the public make progress interacting with and using it.

[SLIDE 5]

So let's take a look at a library that's been offering open data education for a while now. The Edmonton Public Library in Edmonton, Alberta, (Canada) has been hosting Open Data Day

hackathons since 2014. These hackathons bring together city representatives, librarians, businesses, and the public to brainstorm about new ways to use open data.

[SLIDE 6]

Additionally, your library can make resources available on your website about how to find and use open data to help users learn more independently.

The Edmonton Public Library promotes open data education online, through blog posts and topic guides. One popular post, “3 Tips for Creating Data Visualizations That People Understand,” includes useful tips and tricks.

Through programming and website content, libraries can expose their users to this new information resource, and give them tools and exciting ideas for using a range of open data.

[SLIDE 7]

In addition, there are more ambitious initiatives that have developed multi-part open data training, aimed at those looking to take a deep dive with open data. Examples include Pittsburgh’s Data 101 series—developed in collaboration with the Carnegie Library of Pittsburgh—and Data Equity for Main Street—a collaboration between Washington state and the California State Library, pilot-tested in more than 20 libraries. These training courses provide excellent jumping-off points for getting serious with open data. And, when libraries provide facilitation, users can learn while being guided by information experts.

[SLIDE 8]

Now let’s talk about how libraries are collaborating with their local governments on open data. Libraries can contribute in a variety of ways, such as offering technical assistance, strategic guidance, and even just space to host the open data. Some libraries are even promoting open data as a library service, offering up library staff as open data experts, advising on open data best practices (e.g. collection development), and providing insight into community needs and how to approach digital literacy and equity.

To explore this idea further, we have three brief case studies to share.

[SLIDE 9]

The first one is Chapel Hill, North Carolina, which launched its open data portal as a “library service” -- a partnership of the Chapel Hill Public Library and the Town of Chapel Hill. The Chapel Hill Library also has a library staff member who serves as the systems manager for the library and project manager for the portal, which gives the library a strong stake in how the city

is offering open data. As might be expected, the Chapel Hill Public Library also publishes library data to the portal.

[SLIDE 10]

Another example is Chattanooga, Tennessee, a well-known example in the open data literature as one of the early public library innovators in open data. They launched their open data portal in 2015, hosted on the library's web domain, as data.chattlibrary.org. At that time, they were also active in open data programming. Today, the library still publishes circulation data to the portal.

[SLIDE 11]

A third example, currently underway, is Asotin County, Washington. The Asotin County Library, with assistance from an Open Data Literacy intern, has been leading the way for open government data in its area by not only publishing its own library data, but also assisting other county government agencies to open up their data. Recently funded by IMLS to take on more open data work, the Asotin County Library will be furthering their collaborative role in open data going forward.

[SLIDE 12]

Beyond offering open data education and collaborating on open data projects, some libraries go on to publish library data as open data, whether on their own website or on a government open data portal.

If your library is thinking of diving into open data publishing, what might that look like? What kinds of things do libraries publish as open data? Some examples include aggregated data about door counts -- how many people are coming to the library and when. Or you might publish information about what's in your collection, and what gets checked out the most. Or you could focus on library technology, how the WiFi is being used, or when it's most popular.

[SLIDE 13]

Here's an example of data that Seattle Public Library released on their collections through the City of Seattle open data portal. It shows the number of items per branch. Not surprisingly, the SPL Central Library ('cen') is far ahead of the rest, with the following three bars -- Northeast ('net'), Ballard ('bal') and Greenwood ('gwd'), for instance, representing the more uniform circulation seen at other branches.

[SLIDE 14]

Here's a visualization of data about youth library program attendance in Memphis, Tennessee, libraries. Here you can clearly see how far youth attendance at library programs ticks up in the summer, but also in January and October.

[SLIDE 15]

This library open data, pulled from the City of Chicago's open data portal, shows the most popular fiction titles at the Chicago Public Library. In this snapshot, Donna Tartt's *The Goldfinch* was having a moment.

[SLIDE 16]

In Austin, Texas' open data portal, Austin Public Library is posting about WiFi usage in the library, pulling their stats from Meraki, a cloud-controlled WiFi network.

[SLIDE 17]

Recently, the Timberland Regional Public Library, based in Tumwater, Washington, created its own library open data portal, where they publish library data as open data on their own website. The website includes an open data policy, as well as more than a dozen datasets, currently available as spreadsheets. Some of the data available includes cardholder, circulation, collection, internet, programming, and service information.

[SLIDE 18]

These are just a few kinds of data libraries are publishing to open data portals. It's wide-ranging, and as it's still fairly new, offerings are ripe for innovation.

What kind of open data would your library want to share with the public?

What do you think your community wants to know about your library that you could tell them with open data?

[SLIDE 19]

To recap, libraries can act as publishers of open data, and as collaborators with the local government on open data. Education and programming are also important and can be developed independently or to complement the other roles.

We hope this introduction has helped you think about how librarians can get involved with open data, and perhaps energized and inspired to make a start in your own library. If you're wondering what the first steps might look like, here are some tips.

Start with something small. Check to see if your local government is working with open data, and whether they've launched an open data portal. If they have, consider asking one of their open data experts to present an informational talk for your staff, for the public, or both.

You can also encourage and support reference librarians to learn about trends and best practices with open data. There is a lot that can be learned and shared with users just by exploring portals to determine what is available and what can be offered as potential resources to users.

If you already have a solid relationship with your local government offices, or are looking to build a stronger one, consider talking to them about open data, and ask how the library could support their efforts.

If your community already has an open data portal, brainstorm types of library data you could release to the public. What would be feasible to publish? What would the community most benefit from? Thinking through open data publishing is a great way to assess your library's options in connection with your community's information needs.

[SLIDE 20]

Here at the Open Data Literacy project, we believe that libraries are perfectly positioned to connect their patrons to the next information frontier: data. While many roles exist for libraries who want to get involved, we also believe that open data is an area where libraries can take the lead in helping their communities learn about and take advantage of these important and valuable information resources, much as they've always done as information professionals dedicated to helping their communities find and use the information they need.

How will *your* library engage with open data?

We can't wait to hear what you come up with!

[SLIDE 21]

Contact info.

[SLIDES 22-23]

To learn more about the libraries, datasets, and other ideas cited in this presentation, please review our references, or download them on our website as a separate document.

References

Chapel Hill Open Data. (n.d.). Retrieved from <https://www.chapelhillopendata.org/page/home1/>.

Chattanooga Open Data Portal. (n.d.). Retrieved from <https://data.chattlibrary.org>.

Data Equity for Main Street. (n.d.). Retrieved from <https://data-equity.org>.

Gradeck, B. (October 2, 2018). *Data 101 Toolkit*. Retrieved from <http://www.wprdc.org/news/data-101-toolkit/>.

Chicago Data Portal. (2014). *Libraries - Popular Fiction Titles at the Chicago Public Library* [Data file]. Retrieved from <https://data.cityofchicago.org/Education/Libraries-Popular-Fiction-Titles-at-the-Chicago-Pu/nv46-bxa3>.

City of Austin. (2018). *Wireless Usage at Austin Public Library* [Data file]. Retrieved from <https://data.austintexas.gov/Recreation-and-Culture/Wireless-Usage-at-Austin-Public-Library/cr83-wy4q>.

City of Memphis. (2018). *MEMFacts Youth Library Attendance* [Data file]. Retrieved from <https://data.memphistn.gov/Neighborhoods/MEMFacts-Youth-Library-Attendance/2qhu-zch9>.

City of Seattle. (2018). *Items by Location*. Based on Library Collection Items [Data file]. Retrieved from <https://data.seattle.gov/Community/Items-by-Location/i9et-ud68>.

Open Data. (n.d.). Retrieved from <https://www.epl.ca/open-data/>.

Timberland Regional Library Open Data Portal. (n.d.) Retrieved from <https://www.trl.org/open-data>.

Zvyagintseva, L. (February 22, 2018). *3 Tips for Creating Data Visualizations That People Understand*. Retrieved from <https://www.epl.ca/blogs/post/data-visualization-tips/>.

[SLIDES 24-25]

Additional Resources

- ODL Resource Hub | <http://odl.ischool.uw.edu/resources/>
- Data.gov | <https://www.data.gov>
- Washington's Open Data Portal, Data.WA.gov | <https://data.wa.gov>
- Washington State Library's Open Data Information Page | <https://www.sos.wa.gov/library/libraries/projects/opendata/>
- Applications Created with Open Data | <https://www.data.gov/applications>

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Audio transcript produced for The Role of Libraries in Open Data Literacy video found here:
<http://odl.ischool.uw.edu/resources/>

