

Data Literacy Intensive for Librarians

DATA LITERACY INTENSIVE FOR LIBRARIANS

PALS



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CONTENTS

Introduction	1
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PART I. THE PROJECT

1. Approach & Preparation	5
2. Results & Discussion	9

PART II. THE SHORT COURSE CONTENT

3. Start Here	17
4. Data Literacy	19
5. Library Data	26
6. Equity	34
7. The Project	39
8. Wrap Up	44
Following Up	49
About the Authors	50

INTRODUCTION

We talk a lot about data in the library world, but many of us aren't comfortable actually identifying "good" data and how to use it effectively. In order to help librarians address this, Jill Holman and I put together a PALS-funded innovation opportunity for Minnesota State librarians and staff to attend a short course around data literacy in July 2022. The application requirements were minimal. Potential attendees needed to share their "why" and their previous work with data, and they had to speak with their supervisor about their attendance and get their approval to attend. We were excited to extend an invitation for participation to 10 librarians and staff representing both college and university libraries.

The book you're reading is the result of the work done by Jill Holman in preparation for the workshop and the projects developed by the participants of our data literacy intensive. You'll find a range of library types, library workers, and projects, just like you'd find if you surveyed the Minnesota State system. We hope this is only the beginning of organized data literacy work in our system and encourage you to take from this whatever will help you along your path towards data literacy.



Johnna S. Horton
Executive Director of PALS

PART I.

THE PROJECT

Here we discuss the project as a whole including:

- Approach & Preparation
- Results & Discussion

CHAPTER 1.

APPROACH & PREPARATION

We (Johnna Horton and Jill Holman) had such a good response to our presentation “How does COVID impact our library stats and what can we do about it?” at the MnPALS conference in April 2021 that we decided to develop the Data Literacy Intensive for Librarians to help people implement our recommendations.

It’s no secret that many libraries are facing budget cuts and library staff want to feel more confident advocating for their libraries. We also knew that most of our library staff did not learn about data in school. Ultimately, we were hoping to encourage our libraries to be more proactive in talking about equity initiatives to align with system-level expectations defined in [Equity 2030](#).

We really got excited and started planning in November 2021. Johnna had innovation money in the budget, so we could pay library faculty who weren’t on contract in the summer to attend this online workshop. The plan was to have four live sessions via Zoom on Thursdays in July with the expectation of 2 hours per week for homework.

OUTREACH

We sent the first invitation with an overview of the intensive on February 8th. Next we did a streak of daily emails calling attention to data topics for Love Data Week (February 14-18, 2022). There were suggested activities each day (eg. look at data for research guides, out-of-the-box Alma analytics reports, Primo sessions, Alma analytics master classes and explore resources in the [Data & Libraries guide](#)). The last day also had another invitation to apply for the data intensive. The final invitation went out on March 9th for the March 31st deadline.

UDL AND INSTRUCTIONAL DESIGN

Also in February, Jill took a short course called Equity and Technology from Dr. Elizabeth Harsma, Instructional Technologist/Designer at Minnesota State University, Mankato. The course covered Digital Access, Accessibility and Equity, Universal Design for Learning (UDL), and Culturally Responsive Teaching. This was great preparation to build our data intensive! Jill followed Harsma's example to set up the course in D2L Brightspace, the learning management system that all Minnesota State institutions use.

We planned to include UDL principles such as:

- Using templates, examples, vocabulary, and a rubric
- Being flexible about whether they want to work together or alone
- Being mindful that some people have math anxiety and how to support them

Jill added two more principles to that list:

- More opportunities for feedback, reflection, and revision
- More options and flexibility as far as content and format for the assignment

As far as access and accessibility, librarians do have computers and high-speed, reliable internet for their jobs, so we did not have to worry about that. However, Jill had a big realization with accessibility – she always tries to make her materials accessible, but she realized it should be part of the participants' assignments as well.

As far as equity and culturally responsive teaching, several practices helped here:

- This is project-based learning.
- The connection to the real world is clear. They can use this in their marketing and to talk to their institutions' administrators.
- The project allows participants to customize to their situation.
- There are multiple means of engagement, representation, and action/expression.
- Choice and flexibility help the participants lead their learning.
- We continue to reflect to be sure outcomes are the same for all participants and see what improvements we might make if we repeat this course in the future.

BUILDING THE COURSE

Next we started building the course in D2L Brightspace. We had six modules:

- Start Here
- Data Literacy
- Library Data
- Equity
- The Project
- Wrap Up

There were a lot of optional resources so participants could choose their own adventure. There were also options for discussion and reflection.

We opened up the course to participants in D2L on June 22nd so they could prepare for our first live session on July 7th.

Participants were required to attend the four live sessions, which focused on activities and discussion that corresponded with the reading and work done as homework. In addition, participants needed to complete the following for the Data Intensive:

- Intake survey and introduction discussion (Start Here module)
- Reflection: Data Literacy (Data Literacy module)
- Reflection: Library Data (Library Data module)
- Reflection: Equity (Equity module)
- Visual aid and video (Project module)
- Final reflection, conclusion survey, and final revisions for visual aids and videos (Wrap Up module)

Participants needed to meet 80% of the requirements to successfully complete the intensive. We did not use points or letter grades, but rather Harsma's grading scheme:

- Complete
- Resubmit
- Not Yet Complete

PARTICIPANTS

We received fifteen applications for a maximum of 10 spots. Ten enrolled and nine finished. Two were from state universities and the rest were from technical and community colleges. The participants had many competing priorities such as health concerns, other training, travel, and one even left for another job.

TOOLS WE USED

- D2L Brightspace – this was the home for the course
- Zoom – we met live via Zoom web conferencing
- Mediaspace – we created some videos and stored them in Mediaspace
- Quizizz – we used this for some activities (eg. quiz game on data terms)
- Office 365 Whiteboard – each live session finished with an activity where students reflected on:
 - Key Points
 - Favorite Thing I Learned Today
 - Questions I Still Have

All of the applications, other than Quizizz, are enterprise-level and Minnesota State-supported. This allowed for some ease of use due to prior knowledge.

CHAPTER 2.

RESULTS & DISCUSSION

CONTENT

The content seemed appropriate to the skill levels and interests of the participants. There were many optional resources in addition to the requirements, so participants could choose their own adventure. People were engaged during the meetings and we had detailed discussions.

An important theme emerged through the content and discussions. Context is key. We can explain our numbers better. We can describe our charts better. We can tell more of the story surrounding our data. Giving context really helps people connect and understand.

Topics where participants indicated they wanted more resources:

- Statistical significance
- Visualization
- Privacy/ethics

FORMAT

Overall, using D2L Brightspace to house the course and Zoom for four live sessions worked well. Everyone used their web cams and that contributed to a more robust experience.

We received some suggestions to tweak the timing a bit, for example to introduce the project at the beginning so that participants could begin to work on it earlier.

Another theme that emerged with the project was that it was difficult for participants to keep the scope small and focused. They all had the tendency to want to solve big, systemic problems, which was unrealistic for the time we had allotted.

THE PARTICIPANTS AND THEIR PROJECTS

The group was active and interested in each other's perspectives and participants brought varied experience and knowledge. Two instructors and 9 participants was a nice size for the group. Participants were:

- Lisa Abrazo – North Hennepin Community College
- Adam Bezdicek – Hennepin Technical College
- John Daniels – Minneapolis Community and Technical College
- Maria Kingsbury – Southwest Minnesota State University
- Patrick Leepore – Bemidji State University
- Deanna Munson – Anoka Technical College
- Katharyn Rolfe – Lake Superior College
- Jennifer Sippel – Minneapolis Community and Technical College
- Monica Wigdahl – Hennepin Technical College

An interesting theme emerged here: pairs working together. We had two sets of pairs in our participants where one leaned more towards data and the other leaned more towards storytelling. Similarly, having two instructors with complementary skills made this course better than it would have been with just one of us. The participant pairs really did nice work and seemed less stressed about the project than the others. Here are their projects:

- Anoka Technical College – https://drive.google.com/file/d/1eJiJkK0xZb9c6Mwk5Zuq-I_ltlmeJVla/view?usp=sharing
- Bemidji State University – https://mediaspace.minnstate.edu/media/Take+1/1_fb3oj50v
- Hennepin Technical College – https://mediaspace.minnstate.edu/media/HTC+Library+Laptop+ProgramA+Impact+on+Equity+%26+Student+Success+-+FY22/1_5cnldyrn
- Lake Superior College – https://mediaspace.minnstate.edu/media/LSC-Big+Project/1_i5srau17
- Minneapolis Community and Technical College – https://mediaspace.minnstate.edu/media/MCT-Big+Project/1_3aggdqkb
- North Hennepin Community College – https://mediaspace.minnstate.edu/media/Clip+of+NHCC+Annual+Report+Lisa/1_qrdhfr5

- Southwest Minnesota State University – https://mediaspace.minnstate.edu/media/Data+Literacy+Presentation/1_n5ccji9t

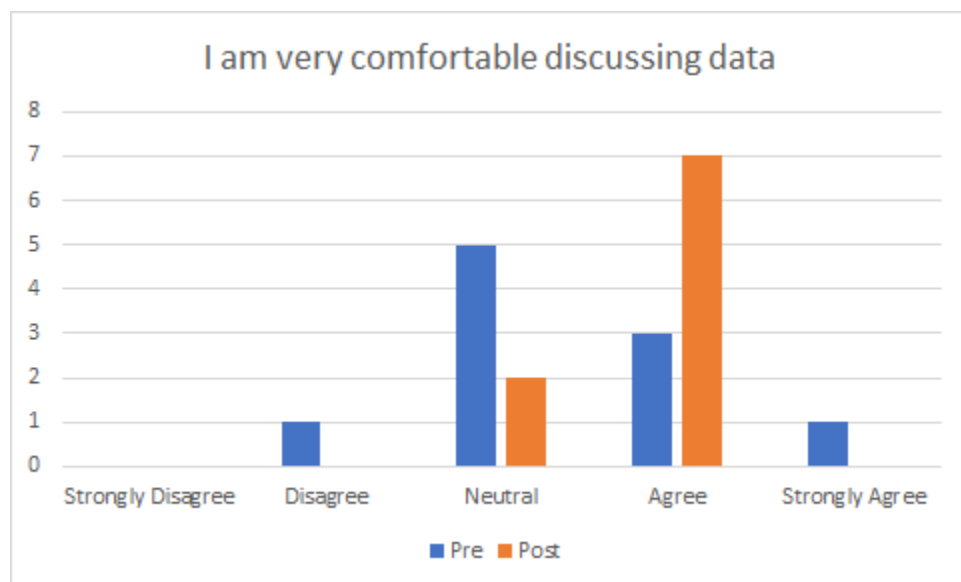
FINAL SURVEY RESULTS

All participants were satisfied with the data intensive and:

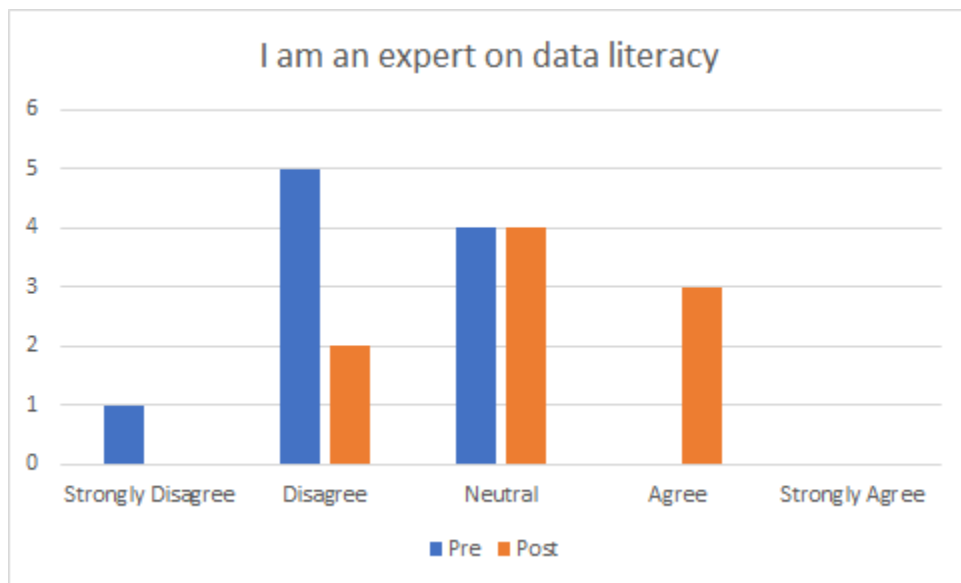
- 67% were very satisfied with the content
- 56% were very satisfied with the format

In addition, they all agreed that they felt better equipped to act and move forward with their library data.

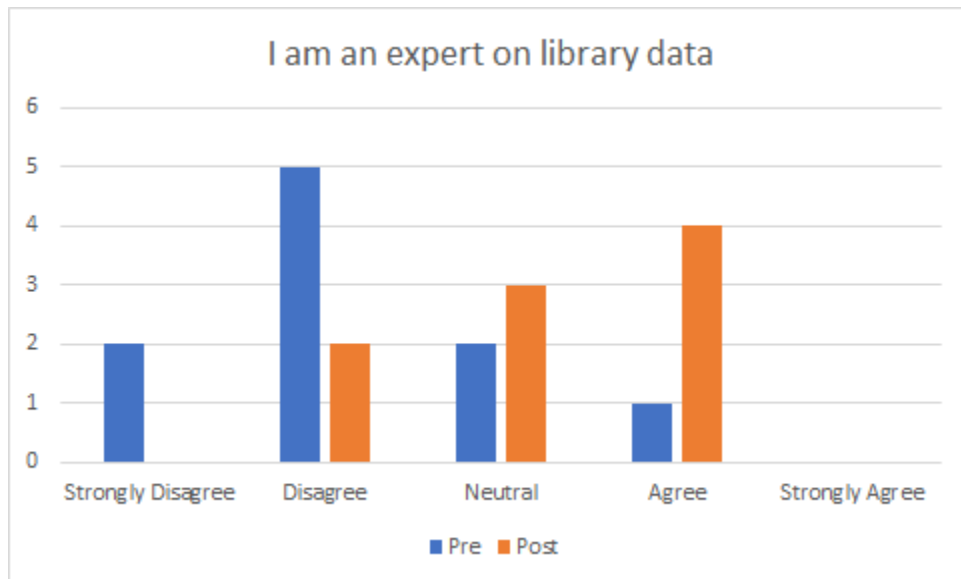
We asked the same three data questions before and after the short course and we did see improvement. Here are charts with the details:



I am very comfortable discussing data – Here we see that 4 people agreed with the statement before the course and 7 agreed after the course.

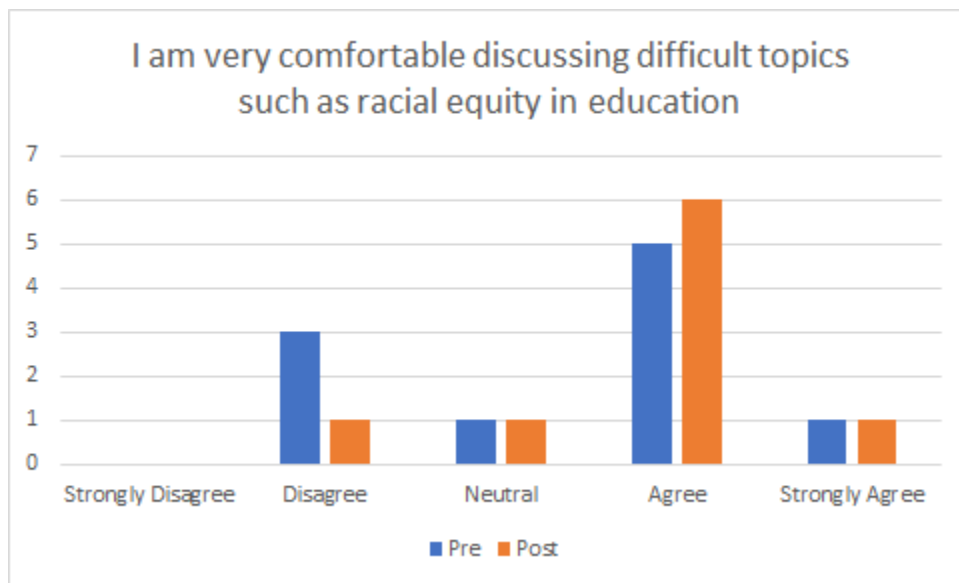


I am an expert on data literacy – Here we see that no one agreed and 6 people disagreed with the statement before the course. After the course, 3 agreed with only 2 disagreeing.

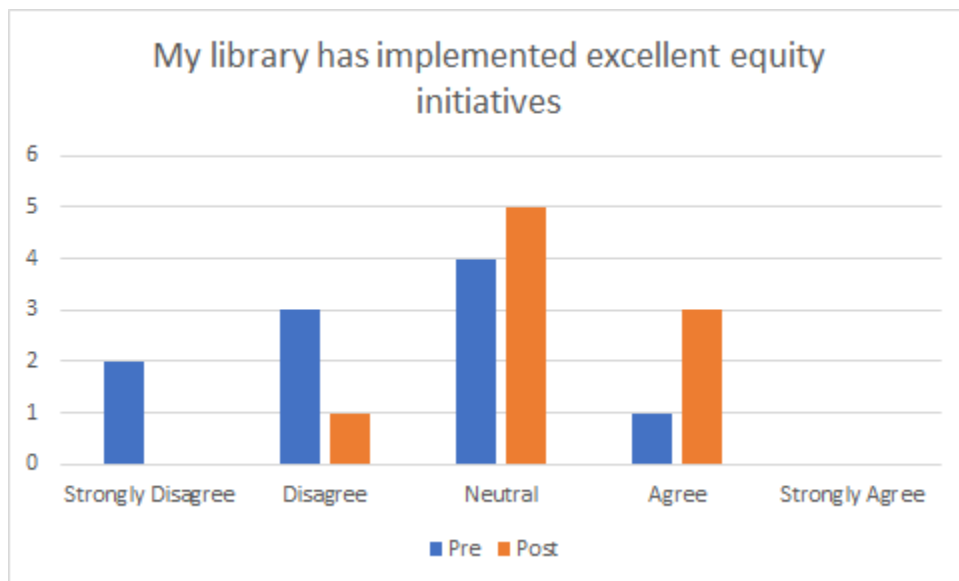


I am an expert on library data – Here we see that only 1 person agreed and 7 people disagreed with the statement before the course. After the course, 4 agreed with only 2 disagreeing.

We also asked two equity questions before and after the short course and we did see improvement. Here are charts with the details:



I am very comfortable discussing difficult topics such as racial equity in education – Here we see that 6 people agreed and 3 people disagreed with the statement before the course. After the course, 7 agreed with only 1 disagreeing.



My library has implemented excellent equity initiatives – Here we see that only 1 person agreed and 5 people disagreed with the statement before the course. After the course, 3 agreed with only 1 disagreeing.

A few more final thoughts:

- One thing to note that was interesting: creating a visual aid and video did seem to cause anxiety for some participants. These are great skills to have for outreach and

teaching. In most cases, that anxiety can be overcome with continued practice.

- We all need practice talking about our data, and we need to take those opportunities when they arise.
- Revision really helps, as does feedback from others.
- We have nine library data ambassadors now!

PART II.

THE SHORT COURSE CONTENT

You can use this section to work through the content on your own, work with a group of colleagues, or develop your own course.

CHAPTER 3.

START HERE

IS THIS COURSE FOR YOU?

- Do you wish you felt more confident about your data?
- Do you feel frustrated with traditional library usage data and annual reports?
- What would it feel like to confidently speak to your administrators about the library's contributions to Equity 2030?
 - Wouldn't it be great to have slides or an infographic you could use when talking to your administrators and in your marketing?
 - Wouldn't it be nice to make connections with others doing this work and support each other?

Are you prepared to discuss how your library contributes to Equity 2030 efforts? Let's work on that! This intensive will also help you use data better in your marketing/outreach and with your administration. (We are not expecting you to become a data librarian here!)

Ideal participants are librarians currently working in Minnesota State college or university libraries who have already done some work on Equity 2030 and/or their strategic plans. Participants will at least need to gather relevant mission / vision / values / strategic plan information for their library and institution and use it in their project.

LEARNING GOALS

After completing this course, you will have:

- Improved your general data literacy
- Determined the best library data for your situation

- Practiced talking about your data with a visual aid

Lastly, if you haven't been a student in awhile, here are some tips:

- Practical Study Tips for Adult Students – <https://youtu.be/I20M80PYORk>
- Essential Study Skills for Adults Returning to School – <https://degrees.snu.edu/blog/essential-study-skills-for-adults-returning-to-school>

We want you to take this seriously and do the work. We also don't want this experience to be too overwhelming. Keep focusing on what seems most relevant and what might be the most impactful improvements you could make for data practices at your library. If you don't have time for a piece of content now, you can circle back to it later. This course will be available as a resource ongoing.

We also highly recommend keeping a learning journal!:

- Reflective Journals and Learning Logs – <https://www.niu.edu/citl/resources/guides/instructional-guide/reflective-journals-and-learning-logs.shtml>
- 7 Learning Journals for Students – <https://medium.co>

One more thing – take a moment to rate how much you agree with the statements below on the following scale:

- 1 – Strongly disagree
- 2 – Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly agree

- I am very comfortable discussing data.
- I am very comfortable discussing difficult topics such as racial equity in education.
- I am an expert on data literacy.
- I am an expert on library data.
- My library has implemented excellent equity initiatives.

CHAPTER 4.

DATA LITERACY

WELCOME TO OUR MODULE ON DATA LITERACY!

Estimates vary, but here are a couple interesting findings:

- 28% of us are data literate in the US
- About 74% of us feel overwhelmed or unhappy when working with data

[\(Read more here\)](#)

Let's do something about that!

In this module, we will learn about data literacy, including:

- Definitions & Buzzwords
- Data pitfalls
- Tidy data
- A bit about statistics and charts/visualizations

We also have a bit about math fear & feelings. We believe in having a growth mindset and we believe you can feel more confident about working with your data.

We encourage you to do as many of the activities as you can. If you are short on time, remember that your requirements for this module are:

- Submit your reflection on data literacy
- Read/watch some of the resources provided

Learning Goal

At the end of this module, you will be able to :

- Discuss data literacy terminology, skills and pitfalls
- Use the principles of tidy data, descriptive statistics, and charts/visualizations

Let's dig in!

WHAT DO WE MEAN BY DATA LITERACY?

Gartner (a respected research firm) says:

Data literacy is the ability to read, write and communicate data in context, with an understanding of the data sources and constructs, analytical methods and techniques applied, and the ability to describe the use case application and resulting business value or outcome. (<https://www.gartner.com/en/information-technology/glossary/data-literacy>)

Also, skim this nice overview here:

Data Literacy for the Data-phobic: 7 Things Beginners Need to Know – <https://venngage.com/blog/data-literacy/>

And if you want more: 10 Data Literacy Skills to Become a Data Citizen – <https://quanthub.com/dataliteracyskills/>

(Note that there are some typos and grammar problems in this resource. Please just focus on what is useful in the content.)

Reflect on the following:

- Did anything surprise you about the definition and/or the 7 things article?
- Would you call yourself data literate? Reflect on your strengths and weaknesses with data. Where do you shine? Where could you use some practice?

HOMEWORK FOR OUR FIRST SESSION

We recognize that we are all at different places with our data literacy, so you get to pick what resources seem most relevant to you.

Please **read or watch at least two** of the following sections in preparation for our live session:

- Data Buzzwords (optional)
- Math fear & feelings -> Growth mindset (optional)
- Avoiding data pitfalls (recommended)
- Tidy data (recommended)
- Do I need to know statistics? (recommended)
- Back of the Napkin (recommended)
- A few more related topics (optional)

Data Buzzwords (optional)

Skim through:

- 17 Data Analytics Buzzwords (and What They Really Mean) – <https://careerfoundry.com/en/blog/data-analytics/data-buzzwords-explained/>

Consider these questions:

- Which terms are the most relevant to our work in libraries?
- Which make you want to learn more?

Bonus – These are terms that might not be familiar to librarians and examples of how they show up related to Ex Libris . . .

1 – AI – <https://cdn2.hubspot.net/hubfs/2909474/Ex%20Libris%20Artificial%20Intelligence%20White%20Paper.pdf>

2 – SQL – <https://developers.exlibrisgroup.com/blog/alma-analytics-sql-filter-examples/>

3 – XML

- [https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_\(English\)/050Administration/050Configuring_General_Alma_Functions/070Configuring_Alma_Letters](https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/050Administration/050Configuring_General_Alma_Functions/070Configuring_Alma_Letters)
- https://knowledge.exlibrisgroup.com/Alma/Community_Knowledge/Generic_XML_Normalization_Rules_and_XPath_Tips

4 – JSON

- [https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_\(English\)/020Acquisitions/090Acquisitions_Infrastructure/010Managing_Vendors/Managing_COUNTER-Compliant_Usage_Data](https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/020Acquisitions/090Acquisitions_Infrastructure/010Managing_Vendors/Managing_COUNTER-Compliant_Usage_Data)
- https://knowledge.exlibrisgroup.com/Alma/Knowledge_Articles/Troubleshooting_Tips_for_COUNTER_5_SUSHI_Harvesting

Math Fear & Feelings -> Growth Mindset (optional)

Read/watch:

- Scared Of Math? Here's One Way To Fight The Fear – <https://www.npr.org/sections/ed/2018/07/16/619328200/got-math-anxiety-here-s-one-way-to-calm-it-down>
- Americans Need to Get Over Their Fear of Math – <https://hbr.org/2019/10/americans-need-to-get-over-their-fear-of-math>
- The power of believing that you can improve – https://www.ted.com/talks/carol_dweck_the_power_of_believing_that_you_can_improve?language=en

Consider these questions:

- How would you rate your feelings about math? (Where 1 is severe math anxiety and 10 is loving math)
- What do you fear most when it comes to math and data?

In our discussions, we had ups and downs in our experiences with math and saw these two things:

1. We can have strengths and weaknesses in different types of math. (Johnna loved geometry, but not advanced algebra. Jill rocks it with statistics, but not calculus.)
2. The attitudes of our teachers and family members mattered. If we had a champion,

that really helped.

Do you find these to be true for you as well?

Avoiding Data Pitfalls (recommended)

Here is a checklist you could use to look for possible problems in a data project:

<https://dataliteracy.com/avoiding-data-pitfalls/>

Consider these questions:

- What pitfalls have you experienced?
- How will you handle it if/when you make a mistake?

You might like this book as a reference: Jones, B. (2020). Avoiding data pitfalls: How to steer clear of common blunders when working with data and presenting analysis and visualizations. Wiley.

Tidy Data (recommended)

Read:

- The 7 sections of Tidy Data for Librarians: <https://librarycarpentry.org/lc-spreadsheets/> (Bonus points if you do the exercises within the module!) We admit Tidy Data is long, but it is important! Please do skim through the 7 sections.

Bonus – Have you seen this quote? “80% of a data analyst’s time is spent on data cleaning.” While there is debate about the percentage, it is true that a lot of time is spent on data cleaning.

Tidy Data Top 10 Key Points:

1. Don’t modify the original data.
2. Keep a log of what you did step by step.
3. Each row is an observation.
4. Each column is a variable.
5. Each cell has only one piece of data. Great picture summarizing the last three points

found in Figure 12.1 here: <https://byuidatascience.github.io/python4ds/tidy-data.html>

6. CSV
7. Don't use formatting to convey info.
8. Don't use spaces in names.
9. Bad values often sort to the top and bottom.
10. Pay special attention to dates. Often the best strategy is year, month, and day in separate columns.

Consider these questions:

- How comfortable do you feel with spreadsheets?
- What is one way you are going to make/keep your data tidier?

Do I Need to Know Statistics? (recommended)

Read/watch:

- Descriptive Statistics – <https://www.scribbr.com/statistics/descriptive-statistics/>
- Normal Distribution – <https://www.scribbr.com/statistics/normal-distribution/>
- Percentage Change – <https://www.mathsisfun.com/numbers/percentage-change.html>
- Do I need to know statistics? (7 minute video): https://mediaspace.minnstate.edu/media/Do+I+need+to+know+statisticsF/1_9j3f6132

Consider these questions:

- What stats have you used?
 - What will you use next?
-

Back of the Napkin (optional)

Read the book, *The Back of the Napkin: Solving Problems and Selling Ideas with Pictures* by Dan Roam or watch this video: <https://youtu.be/XEnrQqOHx3I>

Consider these questions:

- Which kinds of visualizations are most useful in libraries?
- What would appeal most to your administrators?

A Few More Related Topics (optional)

Read:

- How many decimal places to use? – <https://extranet.education.unimelb.edu.au/SME/TNMY/Decimals/Decimals/backinfo/rounding.htm>
- Accuracy v. Precision (think of it like a dartboard) – <https://www.coursehero.com/study-guides/physics/1-3-accuracy-precision-and-significant-figures/>
- Reliability v. Validity – <https://www.scribbr.com/methodology/reliability-vs-validity/>
- Qualitative v. Quantitative – <https://www.scribbr.com/methodology/qualitative-quantitative-research/>

Consider these questions:

- How many decimal places would we use to report results from a library survey?
- What other research/data terms have you heard where you aren't sure of the meaning or if it applies to our work with data in libraries?

CHAPTER 5.

LIBRARY DATA

WELCOME TO OUR MODULE ON LIBRARY DATA!

In this module, we will think about our library data, including:

- Library annual reports
- Your situation and what is the best data for it
- Elevator pitch
- Student success and learning analytics

We encourage you to do as many of the activities as you can. If you are short on time, remember that these are the requirements for this module:

- Read/watch some of the resources provided
- Attend our live session 7/14
- Submit your discussion thread on your best library data by 7/18

Learning Goal

At the end of this module, you will be able to:

- Critique library annual reports
- Analyze your situation and determine what is the best data for it
- Create an elevator pitch

HOMEWORK FOR OUR SECOND SESSION

Library Annual Reports (recommended)

Skim several library annual reports. Here are several examples:

- LOC: <https://www.loc.gov/static/portals/about/reports-and-budgets/documents/annual-reports/fy2020.pdf>
- NYPL: https://www.nypl.org/sites/default/files/annual_report_2020_0.pdf
- Purdue: https://www.lib.purdue.edu/sites/default/files/admin/annualreports/Annual_Report_2018.pdf
- Rutgers: <https://spark.adobe.com/page/qZ6IY83uneNlp/>
- Western Michigan: <https://wmich.edu/library/report>

Bonus points if you find other examples and share them with the group in our Chat area.

Consider these questions:

- What works?
- What could be improved?

Your Situation (required)

Gather any relevant information on your library mission, values, goals, etc. and any that your institution has.

Consider these questions:

- What is most important to your library and to your institution?
- What is unique about your library and/or your institution?
- Choose one goal/priority to focus on in your library.

Here is an example you can use to get clear for your institution:

- Institution: Example College
- Most important thing from mission/values: Affordability
- Most unique thing about library/institution: Many first generation college students
- Current Library Goal: OER support

Now fill it in for your institution:

- Institution:
- Most important thing from mission/values:
- Most unique thing about library/institution:
- Current Library Goal:

Also, you likely have someone local who is knowledgeable about research and data. You might have an Office of Institutional Effectiveness on your campus. Data people might not reach out to you, but they often love to answer your questions if you reach out to them. **Find out what is available on your campus and ask them what was said about the library in the latest student satisfaction survey.**

Lastly, do you know what an IRB is? Research involving human participants goes through an Institutional Review Board. Do you have one on your campus? For example: <https://research.mnsu.edu/institutional-review-board/>

What is your best library data? (required)

In April 2021, Johnna and Jill did a presentation. Johnna talked about the importance of relationships and considering your audience. Jill shared some ideas about how to improve on library stats such as striving to show impact, value, reach and/or satisfaction. You can review that presentation here: <https://mediaspace.minnstate.edu/media/>

[How+does+COVID+impact+our+library+stats+and+what+can+we+do+about+itF/1_rjgex2xv](#)

Consider these questions:

- Who are you trying to reach? Administrators? A certain department? How do they feel about the library currently?
- What would you really like to show evidence for if you could (impact, value, reach and/or satisfaction)?
- What is your biggest success story from 2021?

Another thing to ponder, do you keep a spreadsheet of your key library data year over year? If not, here is an idea of what that could look like:

	A	B	C	D
1		2020-2021	2021-2022	2022-2023
2	ebooks			
3	emedia			
4	ejourals			
5				
6	website page views			
7	repository page views			
8	guides page views			
9				
10	number of new students attended library orientation			
11	total number of new students			
12	Percentage attended			
13				
14	Primo sessions			
15	Full text downloads			
16				
17	Questions from LibStats			
18				

Example spreadsheet for library tracking

P.S. In case you are interested in another resource, ideas about impact, value, reach and satisfaction came from this book: <https://www.elsevier.com/books/libraries-and-key-performance-indicators/appleton/978-0-08-100227-8>

Elevator Pitch (recommended)

Brainstorm:

- Who are you talking to?
- What are your library goals?
- What is unique about your library?
- Why is it important?
- What impact does your library have?
- What is your most impressive number? (eg. our ebook usage is up 75% over last year!)
- What is your question for the end of your pitch? (eg. what is the most frustrating thing about your research process currently?)
- What DEI initiative can you include?

Template:

(For talking with instructors) Our library provides more than learning resources. We help instructors improve their assignments, we teach research skills and information literacy, and we help students succeed. We recently increased our online resources 30% in response to COVID and our OneSearch usage is up 48%. How can we help you?

Want more ideas?: <https://blog.hubspot.com/sales/elevator-pitch-examples> (Note that you have to provide your email address to get the templates, which is not required. Skimming through the text is just fine.)

Suggested activity:

Draft two 30-second elevator speeches for two different situations/audiences eg. your college president, a volunteer, a benefactor, a professional networking event, etc.

Then:

- Pick your favorite of your two elevator speeches to read to the group. Practice it a few times OUT LOUD before our session, preferably with a friend. You also could record it, listen, and revise it.
- Follow up reflection – what was one thing you learned?
- Now go use those elevator speeches with people!

Another way to try this – Elevator speech mad libs: https://www2.archivists.org/sites/all/files/Mad_%20Libs_Elevator_Pitch_2021.pdf

- Write down who are you talking to (eg. administrator or teaching faculty)
- Write down something your library does beyond just offering resources
- Write down something your library has improved recently and by how much
- What DEI initiative can you include?

Student Success and Learning Analytics (optional)

Skim:

- A Comprehensive Primer to Library Learning Analytics Practices, Initiatives, and Privacy Issues – <https://crl.acrl.org/index.php/crl/article/view/24374/32199>
- Keeping Up With... Learning Analytics – https://www.ala.org/acrl/publications/keeping_up_with/learning_analytics

Consider these questions:

- Do you think libraries should be trying to show they contribute to student success?
- Are you concerned about ethical issues with learning analytics?

A bit more on ethical issues and privacy . . .

Check out the Examples of Data Classifications here: <https://www.minnstate.edu/system/ogc/dataprivacy/toolbox.html>

A few notes from the reading:

- Student privacy – users' personal data and/or information behavior, limiting access to sensitive data
- Algorithm bias, widespread data trading and hoarding, and surveillance creep
- Informed consent, data collection, data retention
- Re-identification after anonymization
- Small sample size

A few resources for benchmarking and peer analysis:

- Cool link Johnna found: <https://ivygroup.com/blog/benchmarking-library-performance/>
- IPEDS: <https://nces.ed.gov/ipeds/use-the-data>
- ACRL's Benchmark: <https://www.ala.org/acrl/proftools/benchmark>

What is your best library data?

Reflect on all you have gathered and discuss with your colleagues:

- What new thing do you want to do?
- What is most important to your library and to your institution?
- What is unique about your library and/or your institution?
- Choose one goal/priority to focus on in your library.
- Who are you trying to reach? Administrators? A certain department? How do they feel about the library currently?
- What would you really like to show evidence for if you could (impact, value, reach and/or satisfaction)?
- What is your biggest success story from 2021?
- You are welcome to share your elevator pitch if you are willing!
- What is the atmosphere like on your campus as far as student success and learning analytics?
- Anything you want to say about the tension between data initiatives and patron privacy?

CHAPTER 6.

EQUITY

WELCOME TO OUR MODULE ON EQUITY!

In this module, we will think about equity in libraries, including:

- Minnesota State initiatives, including Equity 2030 and Equity by Design
- Academic Library initiatives

We encourage you to do as many of the activities as you can. If you are short on time, remember that these are the requirements for this module:

- Read/watch some of the resources provided
- Attend our live session 7/21
- Submit your discussion thread on equity reflections by 7/25

Learning Goal

At the end of this module, you will be able to discuss equity initiatives

- From Minnesota State
- In academic libraries
- Your equity initiatives

A note about the equity component in this course . . . we are all on the journey of becoming more culturally responsive and anti-racist. As we do this work together, we may experience

challenging emotions and thoughts – this is expected and totally normal. We invite you to lean into discomfort and envision new ways of being in the world – and that is exciting and hopeful!

MINNESOTA STATE

What is Equity 2030?

Minnesota State's guiding principle of Equity 2030 aims to eliminate educational equity gaps at all Minnesota State colleges and universities by 2030. If you are not already familiar, read:

- <https://www.minnstate.edu/Equity2030/index.html>
- <https://www.minnstate.edu/Equity2030/goal.html>

And here are terms: <https://www.minnstate.edu/system/equity/docs/Minnesota-State-Terms-of-Equity-and-Inclusion-09.2021.pdf>

At minimum, they recommend that the following terms require shared understanding:

- Equity
- Equality
- Disparate outcomes
- Equity gaps
- Marginalized (disadvantaged) groups
- Deficit-minded versus equity-minded

WHAT IS EQUITY BY DESIGN?

Equity by Design is one of many tools available to campuses to aid in actualizing the goals of Equity 2030. Skim:

- Equity by Design Campus Team Toolkit: <https://www.minnstate.edu/system/equity/docs/Equity-by-Design-Campus-Team-Toolkit.pdf> – If you don't have time for the whole toolkit, at least read pages 7-9, 11-12, 15, 19, 32-38.
- Equity by Design Facilitation Tool: https://www.minnstate.edu/system/equity/docs/Navigating-and-Engaging-Data-Discussion_EbD-Facilitation-Tool.pdf – If you don't have time for the whole facilitation tool, read:

- Step 1: Considering Campus Context & Preparedness for Equity by Design
- Step 4: Acclimating & Easing into Data Conversations

A couple more things from the Equity by Design training held in November 2021 . . .

- Let's all agree to some shared commitments with this work. We agree to commit to action, collaboration, evidence, inquiry, and assuming positive intentions, but acknowledging when harm is caused unintentionally.
- When discussing data that can be upsetting for people, it is good to start by asking, "What do we notice?" When people are done naming what they notice, then ask, "What do we wonder?" This process tends to generate great observations and questions.

If you want to review that training, get the links for the 4 videos in the past training section here: <https://www.minnstate.edu/system/equity/Equity%20by%20Design.html>

From the Chancellor's remarks at the ASA/DEI Conference in May 2022: Equity 2030 is an organizing principle, not an initiative.

Key components:

- Supporting and expanding student-centered policies and programs
- Developing equity-minded, evidenced-based, and data-informed practices for monitoring and assessment
- Facilitating and advancing leadership and professional development to support Equity 2030

ACADEMIC LIBRARIES

While the initial focus of Minnesota State's work tends to be on teaching faculty and student outcome data such as grades and graduation rates (which libraries rarely have), libraries still care about equity!

Pick at least two resources from this list to skim:

- ACRL's Diversity Standards Toolkit – <https://acrl.libguides.com/c.php?g=473874&p=3242500>
- Keeping Up With... Universal Design for Learning – https://www.ala.org/acrl/publications/keeping_up_with/udl
- Diversity, Equity & Inclusion Statements on Academic Library Websites – <https://ejournals.bc.edu/index.php/ital/article/view/13353>
- SPEC Kit 356: Diversity and Inclusion – <https://publications.arl.org/Diversity-Inclusion-SPEC-Kit-356>
- How to Use Accessibility Statements to Create a Better Library User Experience – https://www.choice360.org/wp-content/uploads/2022/02/Choice-ACRL-Accessibility-Statements-Webinar_March0822.pdf

Consider these questions:

- How do libraries support student success?
- How might libraries be contributing to equity gaps?
- How can the library help close equity gaps?

There are a lot of possible equity projects in many areas!:

- Collection development
- OER
- LCSH
- Professional development
- Hiring/retention
- Exhibits/events
- Make sure everything works as far as mobile and accessibility
- Anything to make library research less old-fashioned and complicated
- Providing resources in the languages of your community

Consider these questions:

- What have you already done to improve equity in your library?

- What will you do next?

Equity Reflections

Reflect on everything in this section and discuss with your colleagues:

- What is happening on your campus as far as equity initiatives?
- How might libraries be contributing to equity gaps?
- How can the library help close equity gaps?
- What have you already done to improve equity in your library?
- What will you do next?

CHAPTER 7.

THE PROJECT

We have covered a lot! Let's remember a few key items in our three modules:

Data Literacy

- Basic descriptive statistics
- Context

Library Data

- Mission/values/goals
- Audience and best evidence for them
- Elevator pitch

Equity

- Equity 2030
- Equity by Design
- Many possible DEI projects in academic libraries

Along the way, we should be thinking about the library efforts that tie these together to benefit students.

Also, you have to start somewhere! If you think you have no data, it can't be true, given IPEDS. There is always a small place to start. Pick ONE THING and work to analyze that one thing, put it into context of both your library and your institution and then communicate it. It might help to think about possibilities in terms of spaces, resources, and services (thanks to one of our participants for that!) It is great to brainstorm possibilities, but then pick one thing to focus on for the project. (This is hard, we know, because we want to do all the things.)

Ideally, you have a thread where things make sense together – picking up with our previous example . . .

- Most important thing from mission/values: Affordability
 - Most unique thing about library/institution: Many first-generation college students
 - Current library goal: OER support
 - Best data point now: Our OER efforts saved our students \$50,000 in 2021-2022!
 - Working on next: Reach – we will change our tracking so we can say something like: 50% of our departments are using OER.
-

THE PROJECT

This is an opportunity for you to practice talking about your library data and equity initiatives. You will create a visual aid and video. Multiple revisions of both are encouraged!

GOALS

- Create a visual aid customized for your library in your preferred format (slides, infographic, web page, etc.)
- Practice talking about your data via a video you create.

You can choose to work together or alone. Each institution needs a visual aid and each person needs to talk on the video.

VISUAL AID (REQUIRED)

The first task is to create your first draft of your visual aid and provide feedback to a colleague on their visual aid.

Step 1 – Check out these two examples:

- Slides – </content/2022/5863960-DataLiterLib/vis-aid-example.pptx>

- Sway – <https://sway.office.com/XEb0G0SRns2EH3zC?ref=Link>

Format – You are welcome to use one of the examples as your template. You do not have to use the examples. You are welcome to use whatever format/software/platform you wish for your visual aid.

Step 2 – Then customize for your situation (what is important to your library). Consider including these:

- Brief highlights of library with picture
- Key vision
- Biggest strength
- Biggest success
- Be sure to include data (important facts or a chart)
- Next steps

Be sure to add alt text for images!

Step 3 – Create a thread and upload your visual aid.

Step 4 – Engage with your colleagues by reading/listening/watching their threads, then asking questions or sharing ideas.

Step 5 – Once you have feedback, reflect and revise your visual aid.

VIDEO (REQUIRED)

The second task is to create your short video. You will record yourself, showing your visual aid and talking through it. In our session, we will show each video and have Q&A, about 3-5 minutes each, so 10 minutes total for each person/team.

Step 1 – Plan

- Some people like to write out what they are going to say, but this is not required.
- Ideally you will show your face at the beginning of the video. This helps the audience connect with your message. Be sure you have a professional background and decent

lighting. Clothes with solid colors record best.

- Choose what you will use. Macs are a great choice if you have access to one. Laptop microphones on PCs aren't great, so an external microphone is a good idea.
- Zoom or Mediaspace are fine options to record:
 - <https://knowledge.kaltura.com/help/kaltura-capture—completing-and-uploading-your-recording>
 - <https://support.zoom.us/hc/en-us/articles/360059781332-Getting-started-with-recording>

Step 2 – Record

- Talk to your audience, ideally, picture that you are speaking to a supportive champion.
- Record it at least three times. (Think of bloopers you have seen – even professional actors can't get it right in one take.)
- For Zoom, you can go into your Personal Meeting Room, share your screen and record.

Step 3 – Edit

- Even with a great recording, you will still probably want to trim a bit off the beginning and/or end of the video: https://learning.kaltura.com/media/How+to+Trim+or+Clip+Media/1_g3s4aong
- Mediaspace has auto-captions and then you just need to tidy them: <https://it.umn.edu/services-technologies/how-tos/kaltura-find-edit-captions>
- You could add titles, transitions, or music, but this is not required.

Step 4 – Share

- You are welcome to post your video in our Discussion area if you want early feedback from your peers, but this is not required.

EXTRA RESOURCES

Accessible documents:

- <https://www.section508.gov/create/documents/>
- <https://www.washington.edu/accessibility/documents/>

Accessible videos:

- <https://www.washington.edu/accessibility/videos/>
- <https://www.w3.org/WAI/media/av/>
- <https://www.section508.gov/create/video-social/>

CHAPTER 8.

WRAP UP

You made it! We are almost done . . .

In this module you will:

- Review key concepts
- Reflect on your learning and next steps

Learning Goal

At the end of this module, you will be able to:

- Describe key points of data literacy, library data, equity opportunities in libraries.
 - Articulate one example of data for your library
 - Reflect on your next steps with data literacy
 - Provide feedback on this course
-

WHAT HAVE WE ACCOMPLISHED?

Data Literacy

- Buzzwords
- Fear/feelings
- Pitfalls
- Tidy data

- Basic descriptive stats
- Visualization

Library Data

- Annual reports
- Your situation
- Elevator pitch
- Student success
- Privacy/ethics

Equity

- Minnesota State
 - Equity 2030
 - Equity by Design
- Academic Libraries
 - ACRL standards
 - So many project options

We also explored some templates (spreadsheet, Powerpoint and Sway)!

FINAL REFLECTIONS AND NEXT STEPS (REQUIRED)

This is a reflection activity to share examples, reflections, and next steps with your colleagues. Your task is to engage in discussion with others to reflect on your learning experiences.

Share your reflections by responding to these questions in a thread:

- What was it like to create your visual aid and video?
- What library data seems most important to your situation?
- Share an idea or example with your colleagues – what is your favorite thing you have

learned in this workshop and why?

- Now that you've gotten a start with your library data, what are your next steps? Share at least one next step each for learning and for doing.

Take a moment to rate how much you agree with the statements below on the following scale:

1 – Strongly disagree

2 – Disagree

3 – Neutral

4 – Agree

5 – Strongly agree

- I am very comfortable discussing data.
- I am very comfortable discussing difficult topics such as racial equity in education.
- I am an expert on data literacy.
- I am an expert on library data.
- My library has implemented excellent equity initiatives.

Do you feel things have improved a bit? How do your answers compare to when you did this in the Start Here chapter?

Lastly, do you feel better equipped to act and move forward with your library data? If not, what do you still need?

FINAL REVISIONS

- Consider the feedback you have received and what changes you want to make to your video and visual aid.
- Make final revisions to your visual aid and/or video.

THE END

Thank you for being a part of this learning community. This is the end of this course – but not the end of your data journey! This is an invitation to carry your learning in this course forward and continue to explore. Do you want to learn more about any of these?:

- Data Literacy
- Library Data
- Equity
- Outreach and sharing your data

Next steps . . . do you feel ready to talk to your administrators? Do you want to update your marketing? Maybe you want to share your video on your website, social media, blog, or newsletter?

Of course you are welcome to go back to any modules you skipped in this course. In addition, here are a few more ideas for things to learn next:

- Library Carpentry – <https://librarycarpentry.org/lessons/>
- UDL on Campus – <http://udloncampus.cast.org/home>
- Elements of AI – <https://www.elementsofai.com/>

FOLLOWING UP

We held a follow-up meeting in November 2022 to check in. Since several people had mentioned data visualization, we shared a video on that: https://mediaspace.minnstate.edu/media/Data+Visualization/1_nvzp4kpz

Seven of our participants shared progress such as:

- Started a weekly data snapshot for administrators
- Arranged for a library staff member to sit on the Institutional Effectiveness Team
- Pulled reference desk data and formatted into pivot tables
- Exploring development of a library dashboard
- Started a textbook affordability initiative

Johnna and Jill noticed how people struggled to acknowledge that they're making progress. We heard a lot of, "Oh, I haven't had time to do much," but look at all of the work that's happening!

The group said that they wanted to meet again in March 2023 to touch base and share progress. We hope to continue to meet as long as it's useful for the cohort.

ABOUT THE AUTHORS

Johnna led the publishing of annual library reports in all three of her previous positions. Since 2017, she has put more emphasis on data visualization and storytelling techniques to provide accountability for PALS services to the Consortium of MnPALS Libraries, as well as Minnesota State leadership. As the PALS Executive Director, Johnna's work with librarians and system office personnel has helped her better understand how to address the communication gaps between library personnel and non-library administrators.

Jill has been doing data projects for decades, starting with a statistical programming internship at the American Medical Association during college. Next, she studied research methods and statistics as part of her MLS program at the University of Michigan. She also enjoys teaching and has taught a couple credit-bearing courses and many workshops on various topics. Jill started with PALS in 2019 as the Systems Support and Training Librarian.