

Session Format

Roundtable discussion

Program Title

Repositioning Data Literacy as a Mission-Critical Competence

Short Program Description

With data rapidly replacing information as the currency of research, business, government, and healthcare, is it time for librarians to make data literacy central to their professional mission, take on roles as interdisciplinary mediators, and lead the data literacy movement on campus? Join the data literacy debate and discuss what librarians can do to cut across the disciplinary and professional silos now threatening the development of lifewide data literacy. Investigate and critique diverse conceptions and pedagogies for data literacy, and experiment with the MAW theory of stakeholder saliency to identify individuals and groups to target in your data literacy initiatives.

Full Program Description

This roundtable explores best practices for developing data literacy on the 21st century campus, but starts from the premise that existing approaches are too narrow in their conceptions of data literacy, and the groups involved in interventions, because librarians and other educators have not kept up with the extraordinary pace of datafication in society at large. With data supplanting information as the new currency of research, business, government, and healthcare, should it not also move center-stage in library instruction, and moreover be recognized as a core competence for all library staff?

Our review of academic and trade literature crossing multiple disciplines and professions, and more than 35 project descriptions from agency databases, shows little consensus on what data literacy means today. So, while business leaders, educators, scientists, policy makers, journalists, and others agree it is a key competence for workers and citizens, they have quite different views on what that means in practice.

Our discussion starts with the definition question: What does it mean to be data literate on the 21st century campus? We review sample definitions from multiple constituencies, as well as inviting participants to share their own conceptions of data literacy and how it relates to information, digital, and other literacies. An important consideration here is where we set the boundaries among academic, professional, personal, and social interactions with data.

Our next question is pedagogy: How can we best design the teaching and learning of data literacy? The long history and large literature of information literacy instruction in higher education means we have many examples of instructional designs, learning resources, and assessment rubrics that could potentially be adapted to form new models of data literacy education, including materials specifically created for data literacy instruction in academic libraries. Recent interest in data literacy from other sectors, including civil society organizations (as well as primary, secondary, and tertiary education), has generated other ideas for approaching data literacy development.

Finally, the stakeholder question: Who should we work with to develop data literate communities? Given the many different academic, professional, personal, and social contexts where people may be exposed to and interact with data, there are many different individuals and groups who could affect or be affected by library data literacy programs, and become involved as partners and participants. Students and faculty may need help with accessing external data sets, including open government data, or assistance in managing and sharing their own research data. Staff and administrators may require advice and guidance on using bibliometric or altmetric data for research impact assessment, and similarly with managing and interpreting learning analytics data to improve student retention and success. Assessment librarians may need support from data librarians in developing data management plans for big data analytics projects. If academic libraries extend the boundaries of their literacy programs to prepare participants for interaction with data in the workplace and everyday life, then there are many more potential collaborators whose expertise could strengthen provision and contribute to more coherent programming, including librarians working in other sectors.

Discussion questions

What can we take from the similarities and differences among the array of sample definitions of data literacy?

Do you have any examples of good practices in data literacy education to share with colleagues?

Which individuals or groups on your campus would you prioritize as partners or participants in your program?

Learning outcomes

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| Objective 1: | Compare different definitions of data literacy in order to provide a new synthesis enabling librarians to bridge disciplinary and professional silos. |
| Objective 2: | Review the goals, objectives, strategies, and practices of their instructional activities in order to strengthen and revitalize their contributions to developing data literacy. |
| Objective 3: | Apply the MAW model to rank stakeholders on the basis of their power, legitimacy, and urgency, in order to identify participants and partners for their data literacy programs. |

Primary Program Tag: Teaching and Learning

Secondary Program Tag: Information Literacy

Tertiary Program Tag: Data Services

Type of audience

People with some experience in the topic, but looking to grow; People with extensive experience in the topic, but looking for ways to find out what is new or to refresh their knowledge

Primary speaker

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