GIS Librarians for Open Workflows (GLOW)
Forum 1 Summary

Overview: The first GLOW event was held at the UChicago Library on December 7-9, 2022. Twenty librarians from across North America attended to discuss consultative workflows and using open educational resources. Activities included presentations from GIS faculty researchers, consultation role play, and group discussions. Two members of the Advisory Committee, Angela Lee and Jennifer Green, attended at least some of the sessions.

DACUM Activity
Individuals were asked to reflect on their common duties and tasks and recorded those on paper, including a simple rating for how challenging they perceived the duty or task. We dedicated our time to discussing those tasks and duties that were considered to be the more challenging ones, including:

- Administrative work to justify resource needs effectively in the library and campus
  - One suggested solution: Combining GIS services with data management, visualization, and data science services
- Setting expectations for the consultation and services
  - One suggested solution: Clear, preset service levels
- Assessing services. Demonstrating and providing evidence for, measuring, success and impact.
- Designing workshops and aligning learning objectives with instructor’s objectives
  - One suggested solution: Create and work with modules so that different modules can be reused for different purposes.

Consultation Activity
Small groups responded to consultation prompts on either health or infrastructure topics, all of which contained embedded social justice issues.

Insights:

- Spending the time to understand the asker’s experience with GIS is very worthwhile, in order to share information at the right level.
  - There is a tension and opportunity for researchers that have deep expertise in their area but who are new to GIS. Navigating this is challenging.
  - It is key to frame responses depending on the identity and preparation of the asker. For example, a faculty member with deep content expertise but new to GIS versus a graduate student with GIS training.
Groups generated many useful scoping questions that would be useful to have at hand during a consultation.

Some early-stage questions can clarify requests, such as “What do you want from me?” or “What is the final product you hope to have?”

The general workflow is to start with general questions and drive to more specific questions and details.

Consultations often come down to conversations about methods.

Researchers often believe they are the only ones applying geospatial methods to their topic; being able to share with them other published examples can be worthwhile.

Ethical questions are often brought up. Good to be knowledgeable about literature on how others have dealt with similar issues and be ready to provide references to other researchers and IRB boards.

While features between health and infrastructure consultations overlapped, they varied in their general significance between the categories.

- **Health:** featuring heavily was understanding of rates and proportions, choropleths and visualization, sensitive data and ethics, liability, and careful and detailed understanding of variables (How does a research define demographic data, a grocery store, etc.?)
- **Infrastructure:** Citizen science, defining words like access and patterns, accuracy, understanding if there is a real-world impact (e.g., Are lives at risk?), non-spatial data, working with time, challenge of working with different types of governments and their data, private utility companies may hold data but not make it available, big data

**Researcher Presentations**

Researchers using GIS methods presented on their workflows and experiences navigating library services.

**Insights:**

- One presenter said that the services and individuals on campus that he initially thought would be the most helpful for supporting his GIS project turned out not to be. He was surprised that some of the services that ended up supporting his project the most were located in the library.
- Making information and data available digitally and in formats usable to researchers would have a significant impact on research. For example, historical highway data. Most researchers will do research on data that is already at hand.
- Librarians can help researchers grapple with the granularity of different data, and how it’s categorized and recorded.
Role Play
Participants at their respective tables engaged in a brief role play of a research consultation, with each person taking on the role of the researcher, GIS and specialist librarians, or graduate students.

Insights:
- Need to manage dynamics with faculty working with research assistants with technical skills.
  - Conversation between librarian and RA can dominate the consultation.
  - RAs often are the de facto project manager.
  - PI and RA may not be aligned on their ideas or objectives for the project.
- Conversations started from wide ranging and often honed into one or two ideas.
- Deciding on technology and estimating time for projects featured heavily, as did what reoccurring support the librarians and their units could play.

OERs
Groups responded to prompts around use of OERs.

Insights:
- Librarians use a very wide range of OER material in their work. It’s challenging to know if references to those materials are successful as researchers often do not follow up.
- Librarians rely heavily on Google searches, but will reuse sources that they’ve used before.
- Some institutions place an emphasis on remaking online resources so that they come from their own library.
- Making an OER useful: when it’s known as a trusted source, ease of use, relevance to topic, documentation, organization, clear what concepts are required to understand, software agnostic lessons, accessible, modular.

Ideas Raised
- Intake documents can provide helpful pre-consultation info and structure for the initial consultation
- Likert scale for services offered to define scope
- Using “service” undervalues what GIS librarians offer. It can be more productive to reframe in a manner that DH librarians often do, in which GIS is an extension of their learning.
- How do we capture acknowledgement of work done or how it is communicated to supervisors?
- Need to talk to one another about how we’re approaching these things in addition to attending conference presentations.