Dragan Gill

Creating an asset map for student and community success

Finding our strengths through a campus partnership

Rhode Island College (RIC) has a history of collaboration both across campus departments and within the larger Providence and Rhode Island community. These partnerships are an essential factor in student success and ensuring students access to available resources and opportunities. RIC's librarians, with faculty status and liaison duties, are frequently well positioned to facilitate collaboration by both acting as a connection between departments and leveraging our expertise in data management. In 2012 and 2013, RIC began two initiatives: The Rhode Island College Central Falls Innovation Lab (Lab) and Learning for Life (L4L).

In 2015 these two programs, which were already partners, began work on an asset map. Asset mapping focuses on areas of positivity and strength within a community, rather than deficits.[1] An asset map marks these positive geographical locations, which can be defined to the scope and purpose of the map, to better connect users to them. In our case, given Rhode Island's small size, users can see the whole map and self-select by locations that are near their work, home, or other common transportation routes. The decision to make an asset map was fueled by a number of factors, the primary one being the need to organize and showcase the various assets and resources available to the Rhode Island community. Prior to realizing the need for and construction of the asset map, methods that were used to manage service information and connect students with different supports were inadequate. To address this need, our map would include Lab project partners and L4L network organizations. Another priority would be ease of use for students and families, faculty/teachers, administration, and staff in both institutions. As the library representative on the college's Lab planning council, I was recommended by the Vice President of Academic Affairs to join the team working on the project

L4L

L4L was developed through a series of campus and community partnerships. The program focuses primarily on the nonacademic needs of self-selected RIC students, referred to as "scholars." Scholars meet with peer navigators, Social Work and Mental Health Counseling students, who connect them to campus and local social services as well as develop strategies to address barriers to college attainment and completion. L4L college staff members provide oversight and direction, as well as develop partnership networks. Each network addresses a specific area of need for scholars, such as healthcare or housing assistance.

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Prior to the map project, L4L maintained a physical binder of resources, including lists of partner organizations and other social services to which students were frequently referred. While this low-tech system allowed for navigators to update the list by adding brochures from organizations they had positive experiences with, only one navigator or staff member could use the binder at a time. Additionally, because the print list was not indexed, there was not a simple way to assess the networks systematically. As L4L moved from a grant-funded to a college-funded program, office staff looked to review the successes of the program while building goals for the future.

Lab

Founded in 2013, Lab was developed as an agreement between RIC and the Central Falls School District. It was organized around a Memorandum of Agreement, which included nine "cooperative services," such as ongoing student teaching practicums in the district and increased access to RIC for district students and their families. One cooperative service, "The development of a system for evaluation of the effectiveness of the Cooperative Services," required Lab to investigate beyond the effectiveness of each individual project, and develop a more comprehensive assessment plan to analyze the impact Lab was having as a whole. To fulfill this requirement, a system for categorizing and collecting information about projects, their leaders, and collaborators was needed.

As we continued work on this project, the Lab coordinator stepped down and another was brought on, shifting the way Lab managed projects. This change proved beneficial, as it led us to realize that while systems for project management, assessment, and the map should speak to each other, mapping geographically was not the optimal way to share or assess Lab projects. This was primarily because projects only took place in the six schools of the Central Falls district and on the RIC campus. So while the categorization, form and data validation, and controlled vocabulary work we did to address Lab needs were all valuable to the assessment and growth of the Lab, we stopped including projects in the asset map.

The asset map

Because the team—a School of Education graduate intern working for Lab, the Data Management Strategists in L4L and Lab, and an undergraduate Social Work intern completing fieldwork in Central Falls—had begun before I joined, I needed to learn about their respective fields so that the strategies I brought were valuable to their end goals. At the same time, I also introduced the idea of using controlled vocabulary throughout our data collection system to ensure the data could be sorted, filtered, and analyzed. By teaching each other about our fields, we were able to continue as one team working on the problem.

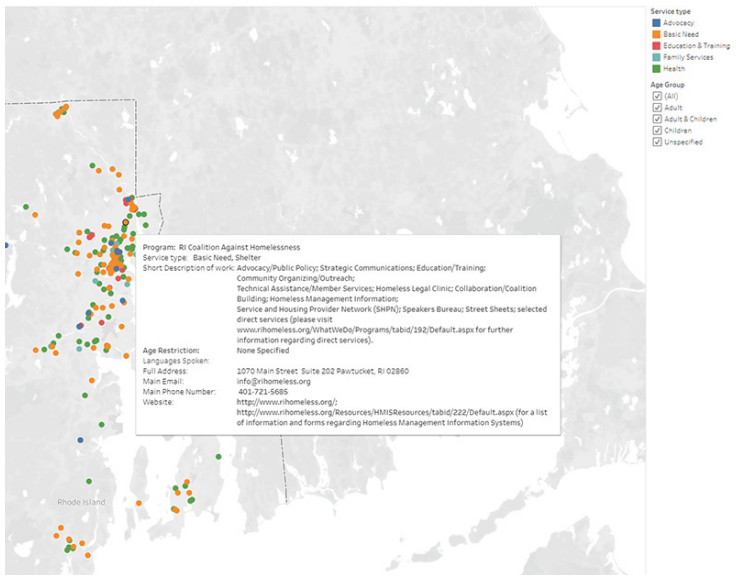
After orienting each other to the project, our next step was to explore what other details we anticipated would be useful to the users and stakeholders. After meeting with Lab and L4L leaders to ensure we understood what questions they sought to answer and the types of reports they'd be presenting with the information we were collecting, we focused on our main question: How would we gather and present this information?

How will we gather and present this information?

When I joined the team, graduate students and interns were already collecting data using terms the projects or partners used to define themselves with no overlaying controlled vocabulary. While this made data collection relatively simple—scraping information from websites and brochures without much processing—it made using the collected data difficult. Lab projects were implemented by faculty and practitioners in many fields, and L4L network partners provide a range of services, resulting in a broad natural language vocabulary. To address this, before settling on any specific tools or

processes to create the map, we spent the majority of our time defining categories and relationships, while deciding what format the collected information would take.

The tools we use to display and organize information have a direct impact on the system we are creating to gather the information. When we began this project, we had no funding for a mapping and data platform, so we collected data and explored using a number of Google tools. Google Forms has robust form and data validation options built into question creation. Through conditional form section branching, Forms allowed us to send targeted sections of a larger data collection tool to potential partners and keep the Lab projects update process streamlined. This turned our thinking towards how a series of questions and interconnected Google Sheets could collect, sort, and validate our data.



The asset map with an asset selected.

As the project became more complex, free platforms could no longer meet our needs. Fortunately, L4L was moving from being grant-funded to being funded through RIC at this time, which freed up funding and allowed us to explore more robust mapping platforms. We evaluated ten potential mapping platforms on the following criteria: price, features (e.g., live data updates), platform/system (e.g., are they fully online or a desktop client), and level of support. Our final two choices were eSpatial and Tableau, which we compared to each other and evaluated based on how they would impact the processes we were already building in Google. We ultimately chose Tableau because of the initial training and ongoing support provided.

Tableau's video tutorials are designed for users in business, so we began by adapting what we learned to our needs. After a few training sessions and some experimentation, we found we were able test ideas more easily than we could in other platforms because we could create several visualizations with the same dataset, testing the platform options without manipulating the imported data. Once we imported data into Tableau, we had new options for which, and how, data is parsed and presented on the map, which would allow us to collect and analyze data for other L4L needs, or create several maps or map layers. This also allowed us to collect data as presented by assets while adding our controlled vocabulary, presenting both where appropriate. For example, we decided to create color-coded filters for the main service types. Each asset and resource on the map became a dot in the color of the service's primary service type. By introducing "cards" (the information that pops up when a user clicks on a location), we were able to include both controlled vocabulary, such

as multiple asset subcategories displayed on the card, and the information collected from websites and brochures, such as the "brief description of services."

More complexly, the map has a filter for the age range served by the organization. To simplify this filter, we created four broad age ranges: adult, adult and children, children, and unspecified. Users are shown this filter as an option for sorting the map data immediately, but if they want to know more, the card provides more detail by showing the service provider's information. After adding in the age data as a filter, without assigning controls, and finding that the natural language used to describe the populations served was one of the most diverse categories, we wanted to make sure the map was still easy to use. Introducing cards allowed us to keep interaction with the map intuitive, while providing greater depth of information, all just in one layer. This makes using the map intuitive, while providing greater depth of information in just one layer.

Once updated, we published the map and relevant data to Tableau's web storage and embedded the interactive map on the library homepage, which I can update directly. This allows us to avoid any delays that might be created by hosting the map on a college-maintained page, The library page is linked and shared on most of the homepages of offices and departments within the division of Student Success, and as a page on the Learning for Life site. Through various partnerships across campus, the library hosts information as a resource hub, making the library homepage not only a practical place to make the map accessible, but one that conveys a shared commitment to providing the information to students, faculty, staff, and the wider college community.

Next steps and project status

The intended process for adding new locations to the map started with Google Forms, with form validation options turned on, to collect and present the data consistently. These forms would have been shared with L4L peer navigators and staff to add any programs they've had experience with or thought would be a benefit to scholars. Next, L4L staff would have evaluated the resources in their network areas, using the form's spreadsheet to add notes and approve or hold adding submissions. Once the data had been updated to include our controlled vocabulary and verified for accuracy, we would move it to a shared "final" spreadsheet stored on a shared drive. Tableau, however, can pull data for a project as a live extraction from a spreadsheet or as a single upload. This would allow us to refresh the map data live from the shared file and update the embedded map on the library's website.

We also created a separate version of the map for L4L peer navigators. This version has a filter for assets and resources and, if the program is an asset, the contact information for our liaison at the location. This version is currently used by peer navigators and L4L staff only, due to some concerns that by publicizing names of contacts at specific programs we would overwhelm individuals with requests that should be handled through the central contact point. This is especially important while L4L continues to develop their partner networks, so some resources are only temporarily categorized as resources until they establish connections with colleagues at the location.

The asset map is currently accessible online but has never been updated. Following our work, a new Vice President for Student Success, the division head to whom L4L reports, began investigating platforms and tools that would share some of the same goals as our map, while also providing broader services to students. Unfortunately, the Vice President for Student Success has since left the college, leaving both the map and exploration of additional platforms in limbo. Having gotten this far, we would like to realize the full potential of the information we have collected, while also updating areas that still need improvement.

Reflections

As is the case for almost everyone on the team, this collaborative project was not formally part of my job description. I took on this task as a member of a college committee. It was essential that we all worked together to keep pushing the project forward when our attention was often drawn back to our primary jobs. When I joined the team, I disrupted the process they had begun to develop, which initially made for more work, but built a foundation we can now easily add to. By adding a layer of controlled vocabulary, which we defined in the project's manual, and refining it with data and form validation, we can add a new resource to the map quickly and review its place in L4L's networks. Over time our library's website has become an ad hoc place for sharing and distributing information beyond the typical scope of the library. By hosting the map, I am not only making our update process smoother, I am sharing it from a place that the campus community trusts.

I am not a cataloger and do not create metadata daily in my job, but I understood enough about these processes to bring these skills to the project. In return, through working on this project, I learned more about the students and communities the college serves and how initiatives like the Lab and L4L support students. While the map has yet to fully be realized as an ongoing L4L service, the process of creating it taught us how to assess partnerships and resources, while reinforcing continued collaboration between the library and L4L.

Note

1. Elizabeth Lightfoot, Jennifer Simmelink McCleary, and Terry Lum, "Asset Mapping as a Research Tool for Community-Based Participatory Research in Social Work," *Social Work Research* 38, no. 1 (2014): 59–64, https://doi.org/10.1093/swr/svu001.

("Doing the work," continued from page 540)

liaison work. Liaisons can use these competencies to identify areas to expand their skills. Further, competencies can be customized to fit the needs of different institutions, as well as be applied to any liaison model. The competencies have been used to develop goals and to train new liaison librarians.

Notes

1. The old and new documents can be found at this institutional repository link: https://thescholarship.ecu.edu/handle/10342/8550.

2. East Carolina University, "Institutional Planning, Assessment and Research," https://www.ecu.edu/cs-acad/ipar/ (accessed January 17, 2020).

3. Carnegie Classification of Institutions of Higher Education, "Institution Lookup," http://carnegieclassifications.iu.edu/lookup/lookup.php (accessed August 3, 2019).

4. University of North Carolina-Greensboro University Libraries, "Liaison Roles and Responsibilities," https://library.uncg.edu/info/library_liaison_responsibilities.aspx (accessed August 3, 2019).

5. Rebecca K. Miller and Lauren Pressley, SPEC Kit 349: Evolution of Library Liaisons (Chicago: Association of Research Libraries, 2015).

6. ACRL, "Framework for Information Literacy for Higher Education," http://www.ala.org/acrl/standards/ilframework (accessed August 3, 2019).

7. ACRL, "Roles and Strengths of Teaching Librarians," http://www.ala.org/acrl/standards/teachinglibrarians (accessed August 3, 2019).

8. ACRL, "Guidelines for Instruction Programs in Academic Libraries," http://www.ala.org/acrl/standards/guidelinesinstruction (accessed August 3, 2019).

9. Chartered Management Institute, "Setting SMART Objectives Checklist 231," Management House, https://www.managers.org.uk/~/media/Files/Checklists/CHK-231-Setting_Smart_Objectives.pdf (accessed August 4, 2019).