2022

Remodeling Library Collections: Designing a Discovery Lab for Student Engagement

Alexandria Chisholm

Sarah Hartman-Caverly

Brett Spencer

REMODELING LIBRARY COLLECTIONS: DESIGNING A DISCOVERY LAB FOR STUDENT ENGAGEMENT

ALEXANDRIA CHISHOLM, SARAH HARTMAN-CAVERLY AND BRETT SPENCER

INTRODUCTION

The Thun Library Discovery Lab, a learner-centered library space featuring complementary browsing collections in a dynamic study and pop-up instruction area, evolved from collections and space assessments along with strategic planning efforts. What started as a ready reference weeding project to create room for a new books display, blossomed into an innovative initiative to reintegrate library collections, research instruction, and library-as-place. Over a six-month period, from January through June 2019, reference and instruction librarians at Thun Library, Penn State Berks critically evaluated collections and library space needs, conducted a library SWOT (strengths, weaknesses, opportunities, and threats) analysis, performed a needs assessment, engaged in multilevel strategic mapping, articulated collection scopes and development strategies, and operationally implemented the Discovery Lab. By repurposing existing seating and shelving furniture, reclassifying materials from the general circulating stacks, reallocating some operations and acquisitions funds, and reimagining our research instruction practices, we were able to implement these budget-neutral improvements with no additional special funding, making this an accessible and replicable project for a diverse range of academic libraries.

BACKGROUND

Thun Library serves the campus community of Penn State Berks, a regional commonwealth campus of Penn State University, delivering more than twenty baccalaureate programs to approximately 2,300 undergraduate students. Three reference and instruction librarians liaise directly with academic divisions—Humanities, Arts, and Social Sciences; Engineering, Business, and Computing; and Science—consulting with disciplinary faculty on research instruction and collection development for courses in major programs. Penn State Berks faculty sustain active research agendas and support a dynamic undergraduate research program. Thun Library serves as a hub of academic and campus life activities, offering silent and quiet study zones as well as group study rooms and collaborative work spaces, hosting student club meetings and the Media Commons, and featuring two classrooms and a large and small conference room, all in a one-story building.

As branch campus librarians in a large state university system, generalized research instruction and reference consultations often take precedence over collection development activities; at Penn State, campus librarians largely rely on the 'one library, geographically dispersed' philosophy of University Libraries to provide knowledge materials for undergraduate students and faculty (Coopey et al., 2016). The net effect of this approach is that print materials in the University Libraries collection are often not locally available at points of need for research instruction or during reference consultations. While the librarians at Penn State Berks coach students to use intracampus borrowing, interlibrary loan, and e-materials to access the most relevant and useful information sources for their research, the reality is that students will often satisfice with what is immediately available, and still prefer print works for long-form reading or for applied purposes such as computer programming. The librarians also recognized that they were neglecting to cultivate critical habits of inquiry in students, such as browsing and topical exploration. In short, the Penn State Berks campus community's needs were not being met with the local knowledge collection.

The librarians were inspired by the work of Penn State York colleagues (Eshbach, 2019) to develop an Idea Collection in response to this collections and instruction gap. The Reading Lounge, a central, high traffic location housing the library's 'Special

Collections', was identified as an ideal place for this original collection. A small-scale weeding project was undertaken to make space which resulted in a larger endeavor, ultimately leading to the creation of the Discovery Lab.

IDEATION

As soon as the librarians began weeding, it became apparent that the Reading Lounge was full of stagnant, unconnected collections, lacking a maintenance plan. As the central location of Thun Library's one-story building, the lounge had become the literal divider between collaborative spaces and independent, quiet study spaces. As a result of the well-intentioned noise management, it had become an uninviting, underutilized space despite being a high-traffic, central location of the library. Dust was settling on the books and shelving, begging the larger question—how was this area being utilized? The resulting space and collections assessments quickly spiraled into additional investigation, including a SWOT analysis, needs assessment, strategic mapping, and ultimately, a revamped collections strategy including mission statements and scope notes.

So how exactly did a small weeding project lead to a total transformation in the library's collections, space, and teaching and learning initiatives? Table 1 lays out the assessment framework that led to the Discovery Lab creation.

Table 1: Discovery Lab Assessment Framework

INTEGRATION & DESIGN

The Discovery Lab at Thun Library, Penn State Berks, is a learner-centered library space featuring complementary browsing collections that support student exploration of information and knowledge-building at all stages of the undergraduate experience—from topic development and current events to academic investigation, scholarly communication, and real-world application (Thun Library, 2020). An innovative approach to the integration of collections, research instruction, and library-as-place, the Discovery Lab answers the call for intentional and localized collection development, engaging and impactful research instruction, and purposeful design of library spaces. The Discovery Lab also contributes to strategic initiatives, including student engagement, retention, and success; equity, diversity, and inclusion; sustainable development; and resource stewardship.

Collections

The Discovery Lab developed organically from a collections analysis and needs assessment of five library collections: reference, ethics, career, periodicals, and faculty publications. Librarians recognized that these five collections, occupying prime real estate in a high-traffic area of the library building, spoke to the library's and institution's missions, but also presented unrealized potential. Using SWOT analysis and strategic goal mapping to identify unmet needs, the librarians articulated new collection development strategies for the periodicals collection, reimagined reference as a collection to inspire early-stage exploration of research topics, and expanded the scope of the ethics, career, and faculty publication collections. The librarians also developed a sixth collection to enhance support for undergraduate research and service-learning curricula.

The six Discovery Lab collections are defined by the following scope statements and collection strategies:

1. The First Draft collection, featuring news publications from multiple perspectives and popular and trade periodicals from a range of disciplines, promotes current events awareness, pluralist sense-making, and civic dialogue, and facilitates connections between research topics and real-world impacts.

2. The Idea collection, a reimagined reference collection offering introductory topical texts and thematic surveys of facts and data, facilitates student exploration of research topics in order to build foundational knowledge and situate inquiry into context. Inspiration for this concept came from the Spark Collection project at the Penn State York campus (Eshbach, 2019).

3. The newly created Engaged Scholarship collection contains research methods handbooks, publishing and presenting guidebooks, style guides, and service-learning handbooks to support original undergraduate research, scholarly communication, community-engaged coursework, and scholarship as a public good.

4. The expanded Ethics and Sustainability collection features case study readers from across the disciplines, intellectual property and other information ethics guides, and a special focus on sustainability topics, to advocate for the ethical creation, distribution, and application of knowledge.

5. The expanded Campus Portfolio collection celebrates and provides access to the scholarly output of Penn State Berks through article portfolios and published monographs featuring the work of Penn State Berks faculty. Article portfolios are rearranged by campus division to facilitate browsing by students wishing to identify potential

undergraduate research advisors. Starting in Spring 2020, Campus Portfolio will also feature students' award-winning undergraduate research and creative accomplishments.

6. The Beyond Berks collection features career planning guides, exam prep materials, entrepreneurship across the disciplines, and holistic 'adulting' titles to promote lifelong learning and support students' transitions to career, graduate study, and self-sustenance.

To keep the project cost-neutral, titles were selected from existing materials in the stacks. This reclassification project served the dual-purpose of identifying gaps in coverage and allowing the librarians to address overlooked topics within their liaison areas. Without an influx of collections funds, the decision was made to reprioritize the majority of selections to support content for the Discovery Lab. Among the long-term project goals is inclusion of titles no older than five years to create not only a highly curated but decidedly current collection. With this objective in mind, redirecting collections funds to the Discovery Lab is strategic.

Recognizing that not all resources are available or advisable for use in print formats, each collection is also e-Enhanced with interactive QR code signage, as seen in Figure 1, promoting relevant campus services, complementary databases, research guides, and other online content.

Figure 1: Discovery Lab e-Enhanced QR Code

Library-As-Space

Librarians designed the Discovery Lab as an inviting and engaging space, reorganizing existing furniture to accommodate independent study, small group collaboration, and pop-up instruction. When not in use for teaching, mobile whiteboards and wall-mounted chalk boards feature engagement prompts to both instruct and inspire students, transforming the Lab into a passive programming space. Students are observed taking the 'scenic route' through the Lab on the way to other destinations within the library building, often pausing to browse new titles highlighted in end-cap display shelving. Collection signs, aimed at creating student interest and to be explanatory of each collection's content, feature original designs by a Thun librarian, who incorporated cleared images of Penn State Berks students engaged in research and service-learning activities.

Figure 2: Engaged Scholarship Collections Signage

In its Phase I form, the Discovery Lab is a budget-neutral initiative. Librarians repurposed existing furniture and collections materials, reprioritized collections spending, and utilized dedicated operating funds to purchase signs. In Fall 2019, librarians will receive a campus sustainability grant to supplement the purchase of a biophilic noise-absorbing mobile moss wall and white board to complement the Ethics & Sustainability Collection, as well as, teaching and learning materials in the pop-up instruction space. Further special project funding is sought for Phase II improvements.

Teaching and Learning

The Discovery Lab also serves as an instruction site, and librarians created and redesigned active and immersive learning activities to leverage the space. Recognizing that web search-savvy undergraduate students often overlook the value of browsing and serendipitous discovery in the research process, the Discovery Lab is designed to facilitate 'searching as strategic exploration' (ACRL, 2016). The proximity of the complementary collections encourages students to explore their research topic and its import in the world, and how best to systemically study it, so that they can ask researchable questions and develop protocols to answer them. The Discovery Lab also acts as a microcosm of the library collection, functioning as an LC-classification training ground and building student self-efficacy to navigate a deep dive of the full stacks.

Figure 3: Penn State Berks student orientation group in the Discovery Lab

In designing the Discovery Lab layout, librarians created a new instruction space that supports kinesthetic learning activities (Chisholm & Spencer, 2017). Worksheets guide student exploration of the space and interaction with physical resources, and students report out their discoveries on mobile white boards and mounted chalkboards in the Lab. The Discovery Lab was the site of a gamified library orientation activity reaching more than 200 first year students, of research instruction for a service-learning course, of career exploration sessions for graduating seniors, and was integrated into the Undergraduate Research Workshop series. Work to incorporate the Lab into disciplinary research methods and capstone courses is underway. Librarians also incorporate the Lab into their reference consultations—for example, rather than suggesting search terms to students, librarians now invite students to use Idea and Engaged Scholarship materials to build foundational knowledge of their research topics.

EVALUATION

Strategic Mapping

The Discovery Lab leverages library collections, research instruction, and library-as-place to impact emerging priorities in librarianship and higher education, including student engagement, retention, and success; equity, diversity, and inclusion; sustainable development; and resource stewardship. During the ideation and planning phase, librarians articulated impact statements for the Discovery Lab and mapped them to strategic goals for Penn State Berks, Penn State University Libraries, and Penn State University, as well as to the ACRL *Framework for Information Literacy* (2016). The impact statements, ranked loosely by priority, are:

1. facilitate student and faculty research development at the Berks campus,

2. encourage curiosity and exploration of the physical collection,

3. support librarian-student research consultations,

4. facilitate collection integration into instruction,

5. connect students to faculty for research opportunities,

6. highlight past, ongoing, and future undergraduate research output at the Berks campus,

7. facilitate and support service learning projects in the Berks community,

8. promote academic programs at the Berks campus and recruit students into the Berks majors, and

9. create flexible and dynamic displays in response to current events, campus events, topical themes, etc., by highlighting materials from each Discovery Lab collection.

Assessment

Librarians undertook a multimodal assessment of the Discovery Lab during Fall 2019. The assessment included conducting 30 qualitative space observations, documenting reference and instruction sessions, recording and analyzing anonymous engagement board responses, and tracking titles added and in-house use counts. The guiding questions for this assessment were:

1. *How do students use the Discovery Lab?*
2. *To what extent did librarians achieve the impacts for which the Discovery Lab was designed?*
3. *What challenges does the Discovery Lab create (with a particular focus on noise management)?*

An IRB protocol is in process for formalized ethnographic space study (Dominguez, 2016; ERIAL Project, n.d., Holder & Lange, 2014; Hughes, 2011; Tewell et al., 2017) in Fall 2020.

CONCLUSION

This project has reinvigorated the authors' passion for collection development by connecting print materials and library space directly to the core mission of academic librarianship—student learning. For the Penn State Berks community, the Lab has expanded faculty, staff, and students' views about how the library can contribute to both curricular design and the student experience. By undertaking the processes of space, collections, and needs assessments; strategic mapping; and articulating mission-grounded collections purpose statements and selection scope notes, this budget-neutral model for student engagement is reproducible in any library context.

The Discovery Lab is a crossroads within Thun Library: a space where collections intersect with research instruction, where questions can be posed and research methods can be identified to help answer them, where students can prepare for next week's research assignment as well as next year's career path.

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Images for Tables and Figures (Editor will put in body of the text later)

Table 1

ACTIVITY	CONSIDERATIONS	THUN LIBRARY OUTCOMES
Space Assessment	• What space is available? • Can existing furniture be reconfigured? • How will students engage with the space? • How can noise pollution be managed?	• The area adjacent to the library entrance, service desk, and librarian offices had a lot of potential. • Furniture was not configured to allow comfortable browsing, and also posed accessibility challenges. • Observations show that students make independent use of research worksheets, participate in engagement prompts, and self-regulate their space use; most of the noise pollution originates elsewhere.
Collections Assessment	• What browsing collections does your library already offer? • How useful are the materials in the collection? (Are they topically relevant and up-to-date?) • How are these collections used? • Are their materials in your circulating stacks that you can reclassify? • Do you have collection development funds to reallocate?	• Existing browsing collections were not actively maintained. Ready reference was not actively used; other browsing materials were not circulating. • Existing materials in the circulating stacks, such as the Oxford *Very Short Introduction* series titles, ethics readers, and career preparation texts, were identified for reclassification. • Collections spending could be reprioritized to purchase new materials.
SWOT Analysis	• Reflect on your library's collections, research instruction practices, and space. ○ What are the internal strengths and weaknesses, and external opportunities and threats?	Example findings: • **Strength** – research instruction focus on active learning. • **Weakness** – collections strategy not aligned with research instruction; prime library space underutilized. • **Opportunities** – renewed campus commitment to undergraduate research for student engagement. • **Threats** – centralization of collections and acquisitions necessitates intrapreneurial creativity in meeting the campus community's needs.
Needs Assessment	• Identify the collections, research, and library space needs of the local academic community. • Draft impact statements for the Discovery Lab.	The library can be a major contributing partner to campus initiatives like undergraduate research. Some needs that the Discovery Lab is designed to meet are: • helping students explore research topics and current affairs, articulate an undergraduate research agenda, and identify faculty advisors; • providing browsing access to research methods handbooks across all disciplines; • making research and information ethics visible to students; • and highlighting how they can share their findings through scholarly communication.
Strategic Mapping	• Map impact statements to other stakeholder goals, including the library and institution strategic plan, and other third-party standards. • Revise impact statements as indicated.	Thun demonstrated the Discovery Lab's alignment with key priorities and informed communication with project stakeholders by mapping impact statements to: • the campus strategic plan • University Libraries strategic plan • Penn State University strategic plans • *ACRL Framework for Information Literacy for Higher Education*
Collections Strategy	• Identify Discovery Lab collections.	Defining the purpose and scope of each collection informed: • new selection practices, • budget allocations,

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and Scope Statements	• Write a purpose statement and define the scope and collections priorities for each collection.	• and research instruction methods.

Figure 1

Figure 2

Figure 3