



# Library Impact Research Report

## **Distinct Academic Learning Communities at Syracuse University Libraries**

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## **Abstract**

This 2019–2022 project explored the impact of embedding three “distinct academic learning communities” in Syracuse University’s Bird Library: the Blackstone LaunchPad; the Center for Learning and Student Success; and the Syracuse Office of Undergraduate Research and Creative Engagement. These communities contribute to academic success, encourage participation in innovative research, creative thinking, and/or problem solving, and foster engaged communities.

Three objectives guided us: (1) explore how the libraries impact the communities; (2) determine how the communities impact the libraries; and (3) identify methods/metrics that could demonstrate reciprocal impact and be useful to the Association of Research Libraries (ARL). Impact was explored from multiple perspectives including community directors, community participants, the libraries’ dean, and libraries’ staff. Data gathering included three surveys and five interviews.

Results point to the value of the library as a central and interdisciplinary academic space for the communities, one that helps break down disciplinary borders by allowing community participants to more easily meet and collaborate with students from other schools and colleges. Community directors saw their missions and desired student outcomes echoed and reinforced by the library as a space signifying academic curiosity and inquiry. Based on our findings, considerations for bringing a new community into a library should include the potential benefits and drawbacks to the community and to the library, including impact on student study and staff spaces, among other factors.

We also found that developing generalizable qualitative measures about space impact poses challenges. Such measures are likely too complex for ARL’s annual survey and would require standardized definitions and methods.

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## **Introduction**

As staff members at Syracuse University Libraries, we conducted this research as part of the libraries' participation in the Association of Research Libraries (ARL) Research Library Impact Framework Initiative. Our research project was one of four projects addressing the following question, which was one of five questions selected in 2018 by ARL's Assessment Committee as a high priority for the Impact Framework Initiative to investigate: "(How) do library spaces facilitate innovative research, creative thinking, and problem solving?" Ultimately, this work is part of ARL's efforts to better align its assessment, research, and analytics programs with the needs of its member libraries in order to enhance their capacity to both individually and collectively demonstrate impact.

As a project focused on space, our research was drastically impacted by the COVID-19 pandemic. From mid-March 2020 until July 2021, very few staff members worked onsite in the libraries. After partially reopening in fall 2020, very few students or faculty visited the libraries. Since fully reopening in summer 2021, when all libraries' staff returned to working on-site, the number of visits to the libraries has not yet returned to pre-pandemic levels and various degrees of hybrid services have either continued or been developed. Like libraries everywhere, we have not yet experienced a full return to the way things were before the pandemic, including how we—and our campus community—think about space.

Despite those changes, which were completely unforeseen when our research team formed in fall of 2019, it is still fruitful to begin by briefly reviewing the ways that academic and research libraries have increasingly shared their spaces with non-traditional services, communities, and units since at least the 1990s. These include spaces for tutoring, writing, research support, academic integrity, cafes, and more. For the purpose of this study, we focused on a subset of these that we termed "distinct academic learning communities" (communities) and defined as:

A distinct academic learning community contributes to academic success by supporting individual growth through the development of research and/or study skills. The community also encourages participants to take part in at least one of the following: innovative research, creative thinking, problem solving. Fostering and building an engaged community is an important attribute or goal of the community. Participants self-select and community participation is not limited by the academic discipline affiliation of potential participants.

We then selected three local distinct academic learning communities embedded in Syracuse's main library (Bird Library) to become the focus of our research. The Blackstone LaunchPad<sup>1</sup> is an entrepreneurship and innovation hub located on the first floor. The Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE),<sup>2</sup> which fosters and supports diverse undergraduate participation in faculty-guided scholarly research and creative inquiry, is located on the second floor. The Center for Learning and Student Success (CLASS)<sup>3</sup> provides and facilitates academic support services for students, including one-on-one tutoring, small-group tutoring and workshops, academic coaching and academic integrity education and training, and is located on the lower level.

## **Why It Matters to Research Libraries**

Research libraries have experienced a consistent trend of sharing space with a variety of other campus programs or services. In some instances, these are organizationally part of the host library, in others, not. Regardless, what is inside a library building may be perceived by our academic communities as being part of that library.<sup>4</sup>

As research libraries conceptualize how to better measure and communicate the impact they have on their institutions, exploring the impact that libraries have on hosted academic learning communities—and vice versa—is increasingly relevant. How to measure that bidirectional impact, however, remains elusive. Traditional library operational metrics do not always meaningfully apply to such communities. Even when used to determine whether they drive greater usage of library services and collections for their populations, this frames impact from the library's direction, rather than that of the community (not to mention retains a focus on operational transactions).

With that in mind, this pilot study takes a holistic approach by exploring impact from multiple perspectives; that of community directors, community participants, the libraries' dean, and libraries' employees. While the exact circumstances of the communities outlined may be unique to Syracuse, their existence is not. Other libraries also host academic learning communities under conditions that probably exhibit at least some broad similarities to those at Syracuse. This study's initial findings may offer directions other ARL libraries can explore further. It is our hope that generalizable results about the impact of embedding academic learning

communities within research libraries will emerge if sufficient data from different institutions becomes widely available.

## Literature Review

To better understand the evolution of these communities and their spaces, it is beneficial to look back at how and why non-traditional services, communities, and units first came to be situated in libraries. This also sheds light on various ways the perceived costs, benefits, and other impacts have been evaluated or considered over time. A few early examples are informative.

In 1995, George Mason University bundled its library into its new Johnson Center alongside the “bookstore, food services, theater, Media Authoring Center, and student and academic program offices.”<sup>5</sup> Other services include the university’s admissions office, a bank, a credit union, an art gallery, a post office, the alumni office, two restaurants, the campus computer store, a convenience store, the campus radio station, a dance studio, a large multi-purpose auditorium, a variety of smaller meeting rooms, and several student-centered multicultural resource centers. Integrating these various functions into one building made “it hard to tell where the library ends and the other activities in the building begin.”<sup>6</sup>

Goucher College’s Athenaeum was similarly designed, but without many of the co-curricular units. It featured a “studio for the campus radio station, classrooms, a commuter lounge with a full kitchen, a unisex bathroom with a shower, along with all of the usual trappings of a traditional library...”<sup>7</sup>

Both George Mason and Goucher embedded the library alongside other functional spaces in new constructions. Far more common, however, is the reallocation or repurposing of space in an already existing library. Declining use of print collections and increasing calls for more student spaces appear regularly in the literature, notably overlapping with the rise of the “learning commons.” *Redefining the Academic Library* stated valuable square footage could be used “to bring students together to work, study, and socialize.”<sup>8</sup> This not only included learning commons with study spaces, technology and multimedia, but also “academic support units, such as centers for teaching and learning, specialized labs for math, writing, and languages, student advising, and technical support.”<sup>9</sup> Although often not part of the library’s organizational structure, these service units “expanded the [library’s] conceptual reach and relevance” making it a “vibrant, inclusive unit essential to student success

on campus.”<sup>10</sup> In short, “what was once a warehouse for books becomes a vibrant hub of activity, repositioning the library building as the intellectual center of campus.<sup>11</sup>

As new space requests proliferated, the need for strategic decision making about how to repurpose space grew. In “The Battle over Library Spaces,” Rick Anderson noted the increasing “pressure on the library to make room for other services and programs will be strong and constant, and the library administrator will be continually faced with difficult political, practical, and strategic choices.” He pointed out that: (1) the library is a campus entity that does not belong to the library administrator; (2) whatever the library administrator’s response, it needs to be based on sound strategy, not reflexive defensiveness; and (3) that cooperating creates “political capital” that can generate more benefits than negatives for the library.<sup>12</sup> Anderson went on to conclude that “when programs and people do end up in the library they will usually represent initiatives that nicely complement the library’s own programs and goals.”<sup>13</sup>

More recently, Barbara Fister in *New Roles Ahead* wrote that “though the library as an institution is still popularly identified with books, it can also be an art gallery, a space for traveling exhibits, a performance center, a lab, a makerspace, and a press. It’s a place where students can discover who they are as they begin to join the enduring conversations that define scholarship, a place where faculty can get support as they explore innovative ways to share their findings with the public. The library, as the common ground for the campus and a local node on a global intellectual commons, can embody and model values that connect and can make the world a place where all are encouraged to think freely, create, and share for the greater good.”<sup>14</sup>

Fister’s summary presciently foreshadows a point that emerged when we interviewed the directors of the three communities featured in this study. They each described being located in the library as beneficial for their communities because of its interdisciplinary nature and centrality, as well as how the library signifies academic curiosity and inquiry.

## Learning Communities

The articles mentioned the changing nature of the academic library as a place, hinting at the broader role(s) it might play, particularly for inculcating community. Pederson, in “*Learning Communities and the Academic Library*,” noted, “Traditional roles and relationships often change in learning communities as a result of the emphasis on collaboration, teamwork, and the social construction of knowledge. Shared knowledge, shared knowing, and shared responsibility are three key features of the

most robust learning communities.”<sup>15</sup> Furthermore, Choy and Goh described the library and its role in building community as notable for bringing together different groups from across campus and offering “its space and expertise in helping an individual or a group to expose and showcase their intellectual work and output so that others can become aware or participate in their further development.”<sup>16</sup>

## The State University of New York *Library Space Survey*

In 2010, a *Library Space Survey* of the SUNY Librarians Association (SUNYLA) and SUNY library directors explored the perceived “encroachment” on library space by non-library activities. Five questions asked about changes to spaces, the nature of those changes, and suggestions for solutions to “space issues.” Seventy-four percent of staff responses indicated spaces had been “converted or reassigned.” The library director survey was very similar with 81% reporting that spaces had been “converted or reassigned.” Spaces were repurposed to host a variety of services, including teaching excellence, writing centers, tutoring and other academic support, study abroad, and IT, in addition to other uses like a cafe or serving as surge/swing space for campus units dislocated during renovations.

Perhaps unsurprisingly, library staff tended to view these changes less positively than directors. The former were largely concerned about the lack of consultation with library staff when planning and implementing space changes and thought the space could be better used for other purposes, such as library staff office space, library instruction space, and student study space. Library directors generally viewed the changes (often made possible by locating lower use print collections offsite) very positively, especially if they increased gate counts and served campus academic needs more broadly.<sup>17</sup>

When we began our research for this project, we distributed a survey to the ARL-Assess email list that asked thematically similar questions to the SUNY survey, and received similar responses. When surveying the staff at the libraries, we also received responses that aligned with those of the SUNY and ARL surveys.

## Conclusions

The literature contains ample examples of libraries transforming from primarily book depositories to user-focused spaces populated by a wide variety of not only “library services,” but increasingly “non-traditional” services or programs that center on student support. Beyond conjecture and anecdotal evidence, little could be found that

spoke to the impact being based in libraries had on these communities, nor of the impact their presence had on their host libraries. There has also been little discussion of methods/metrics for tracking such impact, either qualitatively or quantitatively, much less longitudinally. Nor was there sustained discussion of ARL or other annual reporting requirements.

## **Objectives**

Our project focused on exploring the impact of Syracuse University Libraries' spaces on distinct academic learning communities located there, as well as how the communities impact the libraries, and on identifying methods and metrics that could be used to demonstrate this impact. Syracuse University Libraries approached this project with three objectives in mind:

First, by exploring the relationship between the libraries' spaces and key community attributes outlined in our definition of distinct academic learning community, such as contributing to academic success, fostering an engaged community, and encouraging innovative research, creative thinking, and/or problem solving, we sought to explore how the libraries impact the communities.

Second, we sought to determine how distinct academic learning communities located at Syracuse University Libraries impact the libraries' spaces, services, staffing, collections, and budget so the libraries may build on those qualities that foster a positive impact, take action to weaken or eliminate negative impacts, and become better informed for decision-making concerning any future community partnerships.

Finally, we sought to identify both quantitative and qualitative methods and metrics that would demonstrate the reciprocal impact of Syracuse University Libraries and distinct academic learning communities explored in objectives one and two. This was done so that if any promising measures did emerge, they might be useful to ARL as it develops measures for assessing the reciprocal impact of its member libraries and similar types of communities located in member library spaces.

## **Methodology**

We used a mixed methods approach to our study by combining operational and usage data with insights gained through surveys and interviews.

We conducted three surveys. All surveys were anonymous, although some general demographic data was collected. The first survey was distributed via the ARL-Assess email list in summer 2020 to gather peer perceptions regarding “traditionally non-library units or other campus units” located in their libraries. The survey was distributed to approximately 1,400 list subscribers, with 43 responses received, a 3% response rate. Respondents included 28 librarians, 6 assessment librarians, 6 associate university librarians, and 3 library deans/directors. Responses revealed many similarities (in the types of, and perceptions of, these units) to the results of the 2010 *SUNY Library Space Survey* referenced in our literature review.

In spring 2021, we surveyed student participants and recent alums of each of the three communities to gain insight into their perception and use of community space, as well as the libraries. The survey was distributed to 3,100 students/alums. Of that number, 100 were LaunchPad, 250 were SOURCE, and 2,750 were CLASS participants. We received 88 responses to the student/alum survey with 56 (64%) completed. Of those, 13 (23%) were LaunchPad, 15 (27%) were SOURCE, and 28 (50%) were CLASS participants.

That summer, we also surveyed the libraries’ employees to gauge their perception of and interaction with the communities. Distributed to the libraries’ 127 staff (excluding the dean of libraries and those staff working in the communities), the survey received 26 completed responses for a 19% response rate. Of the respondents, 62% represented public facing areas, with the balance from administration and special collections.

As part of the ARL Impact Framework Initiative grant from the Institute of Museum and Library Services (IMLS), our team was awarded a subgrant to encourage participation in the student and the employee surveys. These funds allowed us to offer survey respondents the chance to win gift cards in raffles.

In addition to the surveys, we conducted five semi-structured in-depth interviews in spring 2021. All interviews were conducted online. Three of these interviews were conducted with each of the community directors, and two interviews were conducted with the dean of Syracuse University Libraries. The three director interviews were each 60 minutes long and were analyzed using a form of interpretive phenomenological analysis where the focus is on participants’ lived experiences and meaning-making in a particular context. The aim of the analysis was to conceptualize intended meanings and derive overarching themes. The first interview with the dean of the libraries was 60 minutes long and the second interview was 90 minutes long. These interviews were analyzed to gain insight into the dean’s perspective on the

communities and their impact, as well to contextualize the themes identified in the director interviews. Our survey instruments are in **Appendix A**. Interview guides are in **Appendix B**, followed by interview analysis methods in **Appendix C**.

## **Background on Syracuse University and Bird Library**

Syracuse University, an R1 research university located in Central New York, comprises 13 schools and colleges offering more than 200 majors and 200 advanced degree programs.

The university served 14,479 undergraduate, 6,193 graduate, and 650 law students, a total of 21,322 during the 2021–22 academic year. The number of full-time instructional faculty was 1,121 for the same period.

Like those of most research universities, Syracuse University Libraries has a number of different locations, with some being freestanding buildings, others being smaller sites embedded in schools or colleges, and still others focusing primarily on storage and not accessible for patron visits.

Bird Library, Syracuse's main library, is the busiest academic building on campus based on the number of visits. Its seven floors cover 215,567 total square feet and holds over 1.2 million volumes. The majority of the libraries' service points and staff are located in Bird. The three distinct academic learning communities that are the focus of this report are also located in Bird Library.

Additionally, the libraries have two other publicly available spaces on the main campus. First, Carnegie Library, a classic 1907 structure that houses both a grand reading room and a collection of circulating books (roughly 10% the size of the collection in Bird). Notably, Carnegie also houses the Mathematics Department. Second, King + King Architecture Library is a small branch located in a building that houses the School of Architecture.

Two miles south of the main campus, the libraries also maintain two offsite storage structures for low-use collections and/or those requiring more particular environmental conditions: the “Facility,” a two-module high-density state of the art facility, and “Hawkins,” an older warehouse structure.

## Description of Three Communities

### Blackstone LaunchPad

The Blackstone LaunchPad was founded in 2016 as part of a global network of entrepreneurship and innovation hubs located at 32 universities around the world. Due to the desire to position it as a prominent campus-wide resource, the LaunchPad was situated on the first floor of Bird Library in a busy area that was previously student study space. Initially funded by a three-year grant from the Blackstone Charitable Foundation, the LaunchPad has been organizationally part of the libraries from its inception, with the libraries' dean designated as the grant PI. Once the grant funding ceased, the director continued to report directly to the dean. The LaunchPad, which "connects the campus innovation ecosystem with a global network that provides support for aspiring entrepreneurs," supports students, staff, and faculty who are interested in developing their ideas into products or services, founding new (for-profit or non-profit) enterprises, or facilitating "innovation within existing organizations."<sup>18</sup> It brings together students from a variety of disciplines, helping them develop the skills they need to grow their ideas, win pitch competition funding, and attract investors. Through its many student entrepreneur success stories, including a significant amount of prize money won by students, the LaunchPad has emerged as a new locus for libraries' fundraising efforts. To expand its programmatic capacity, the LaunchPad's first floor space, which includes staff space, coworking space, meeting, and teaching space, doubled in 2018.

### Center for Learning and Student Success (CLASS)

The Center for Learning and Student Success (CLASS), organizationally part of the Office of Academic Affairs, was initially located on the third floor of Bird Library in 2017 to offer first-year students tutoring for particularly challenging STEM courses. CLASS's tutoring and other academic support offerings have since expanded. In order to help "students become expert independent learners," CLASS currently provides and facilitates academic support services for students in multiple disciplines, including one-on-one tutoring, small-group tutoring and workshops, academic coaching, and academic integrity education and training.<sup>19</sup> As its programming to enhance student learning and the number of participating students increased, CLASS's space within the library also expanded, tripling in size and moving to the lower level of Bird Library in 2019. The location, which now includes tutoring,

classroom, and staff office space, was created in what had been open study space for students and office spaces for libraries' employees.

## **Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE)**

The mission of the Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE) is to “foster and support diverse undergraduate participation in faculty-guided scholarly research and creative inquiry.”<sup>20</sup> Organizationally, SOURCE is part of the Office of Research and was created in 2019 and installed on the second floor of Bird Library in space that had previously been occupied by stacks, student study space, and libraries’ employees’ offices. SOURCE space consists of an office, a conference room, and community space modeled on the LaunchPad. The SOURCE not only facilitates matching undergraduate students with faculty to participate in research projects that can lead to publication, but also provides funding through grant competitions. The SOURCE provides opportunities for undergraduates to deeply engage in learning via research and gain skills that will likely enhance their success in future endeavors.

Photos of the three community spaces are in **Appendix D**.

## **Findings**

Based on the surveys and interviews we conducted, we present our findings in the following seven broad areas:

- Considerations for bringing communities into the libraries
- Communities’ activities in community and libraries’ space
- Communities’ current and ideal spaces
- Impact of communities on Bird Library space
- Communities collaborating with the libraries and using libraries’ resources
- Benefits of communities for the libraries
- Perspectives on measuring impact

We begin with a discussion of the considerations that go into deciding whether a new community, unit, or service should be brought into Syracuse University Libraries’ spaces.

## **Considerations for Bringing Communities into the Libraries**

### *Dean's Perspective on Considerations for Bringing in Communities*

During his interviews, Dean of Libraries and University Librarian David Seaman shared his perspective on student-focused communities in academic libraries, as well as the factors and considerations that go into bringing these types of communities into Syracuse University Libraries. Similar to the thoughts reflected in the literature review, the dean considers “student facing, student success, co-curricular services [to be] increasingly traditional library services.” These services fit on “the continuum of change libraries have experienced in the last few decades,” from “having space occupied by books, [to] having space occupied by study space, [to] generating appropriate student-facing services and creating communities.” In a survey of subscribers to the ARL-Assess email list, 37 of the 43 respondents indicated that they had communities like these in their buildings, with 15 respondents indicating that they reported to the library and 8 that they did not. Over 56% of the respondents indicated that the units came to the library as the result of mutual agreement and synergies, 38% indicated that the decision was made by university (not library) administration, and 6% indicated that other circumstances were involved.

#### **Alignment of Communities' Missions with the Libraries' Mission and Strategic Plan**

When discussing considerations for deciding whether to bring a new community or service into the libraries, the dean described the importance of an alignment between the mission of the community and the libraries' mission. The dean described the libraries' mission as aiming “to be central to the intellectual life of the campus, in the way the chapel is central to spiritual life.” He then described the campus focus on student success and a culture of innovation, emphasizing that the library is not an end in itself, but supports university teaching and research by “advancing learning, creativity, and the community of research.”

Along with mission alignment, the possibility of bringing in a new community or service is tested against the libraries' strategic plan, which is a further articulation of the libraries' mission and goals. Because the strategic planning process included input from libraries' employees through “anonymous feedback and town hall meetings and department discussions,” the dean described testing against the strategic plan as “the principled way” that the perspectives of library employees are considered when deciding whether to bring communities or services into the libraries.

## Space and Funding Considerations

In addition to checking for an alignment between missions and testing against the Libraries' strategic plan, the dean also considers how much space the community needs and whether the space (which is often study space) allocated to the community could be offset by an allocation of similar sized study space in a different part of the library. Other considerations include whether the community plans to use the space full-time, whether the community could benefit from the libraries' extended open hours, and whether the space allocated to the community could be easily repurposed should the community ever relocate to another part of the library or another part of campus.

Funding for space renovations is sometimes another factor when considering allocating library space to a service or community. The dean described the grant-funded LaunchPad as having "paid for itself in three and a half years with Blackstone Charitable Foundation money." After the conclusion of the grant "the university has picked it up," with the LaunchPad director and LaunchPad program manager positions representing the first new fully funded full-time positions the libraries had gained "in a very long time." Similarly, when CLASS sought to expand from their initial space on the third floor of Bird Library to Bird's lower level, the university paid for the renovations on the lower level and paid for the renovation of additional study space on the second-floor area, in the surrounding the space where the SOURCE is now located. Because the renovations and related remediation were not expenses the libraries' budget could have absorbed, the dean considered the university-provided funding for both as a significant long-term benefit to the libraries.

The dean also considers whether the services or activities the community offers are "part of the academic life of the university," and whether the community represents "broad-based campus activity" that could benefit from central space. The dean described the value of the library as the center for these activities as being heightened on a campus like Syracuse University, where first-year students join their home school or college on their first day and often spend more and more time in that school or college as they progress in their academic program. He described the library as "one of the places where you can find students and faculty from other schools and colleges."

## *Libraries' Employees' Perspectives on Considerations for Bringing in Communities*

The survey of libraries' employees began by asking how employees learned that the communities would be located (or were already located) in Bird Library. Surprisingly, 40% indicated that they learned about the communities from the university with 15% learning about them from the libraries. Other responses included noticing the community (21%), learning about them informally (19%), and other (5%). The survey indicated that initial reactions to the communities were largely positive, a feeling that has changed little over time. The percentage of positive feelings was higher for two of the communities—SOURCE and CLASS (62% each)—than for the LaunchPad (46%). Similarly, when asked about the alignment of the communities with the libraries' mission and goals, most respondents indicated that the communities were aligned, with SOURCE and CLASS being perceived as more aligned than the LaunchPad. In comments, some respondents expressed concerns about alignment between the Libraries and the communities. One respondent commented that the LaunchPad seemed to be more aligned with the business school. In other comments, a few respondents noted discovery, exploration, creation of new knowledge, and furthering student success as being key aspects of alignment with the communities.

When asked about factors to consider when potentially offering space to new communities, alignment with the mission of the libraries and contribution to student success/experience were the primary considerations. There were, however, several comments indicating concern about the space needs of libraries' staff as well as the impact on student study spaces. The following comment is representative of the space concerns expressed: After cautioning against taking space away from student study and library service spaces, the respondent recommended that libraries' staff space needs be "addressed, and planned for, before allocating space to other groups." A couple of comments highly recommended that libraries' staff be consulted during, and early on in, the decision-making process when considering offering space to communities in the future.

## **Communities' Activities in Community and Libraries' Space**

### *Space and Engaged Community*

Through interviews with community directors, we learned more about the activities of their communities and their communities' use of space. The concepts of

interdisciplinary space and its relation to engaged community emerged as prominent themes throughout the interviews.

### Library as Interdisciplinary Central Space

In interviews with the community directors, the “broad-based campus activity” aspect of the three communities became apparent, along with their interdisciplinary nature. The directors noted serving students from across the university and collaborating with a wide variety of units, offices, schools, and colleges. SOURCE Director Kate Hansen described the SOURCE’s mission as expanding and deepening undergraduate research opportunities for diverse students in all disciplines and functioning as a campus-wide support hub for undergraduate research. LaunchPad Executive Director Linda Dickerson Hartsock described the LaunchPad mission as not only being SU’s innovation hub serving any faculty, staff, or student interested in venture creation or learning to use innovation skill sets, but also being an interdisciplinary, cross-cultural, experiential program. According to CLASS Director Margaret Usdansky, CLASS’s mission is to partner with academic support units across campus plus academic departments and faculty to provide academic support, tutoring, and coaching to students. Leading academic integrity policy and case management in collaboration with SU’s schools and colleges was also described as part of CLASS’s mission.

Multiple disciplines are represented by community participants. While participants in each community come from different schools and colleges and various disciplines throughout the University, each director noted certain schools and colleges are represented more than others. These vary by community, as do the annual numbers of participants. SOURCE has approximately 450 undergraduate participants, including 250 active grant recipients; the LaunchPad attracts approximately 700 to 1,000 students; and CLASS serves thousands of undergraduate participants. The CLASS director explained that “Students are from a broad group of fields, but many are STEM students because STEM often has large introductory challenging courses, and those types of courses are what CLASS supports with tutoring.” SOURCE has high participation from arts and sciences (including STEM), as well as visual and performing arts and architecture, among others. The LaunchPad attracts strong interest from students in business, information science, media and communications, as well as arts and sciences.

Bird Library’s centrality and interdisciplinary nature were mentioned when discussing the benefits of being located in the library. The CLASS and SOURCE directors both noted the benefit of the physical location of Bird Library as being, in

the CLASS director's words, "central into campus, it's a huge draw for students" and "a convenient sort of mutually available space for students." The SOURC director described Bird Library as a "campus hub in general for studying, hanging out, socializing. So, I think it's helpful to just be in a central location." She also highlighted the benefit of being in such a busy student space, stating, "Bird Library sees a lot of traffic. So, students walk by, and they hopefully are like, 'Huh. What is this glass cube?'" Along with the central location and busyness of Bird Library, the SOURCE director described the benefit of being in a space "serving all the schools and colleges," thereby sending the message to students that the SOURCE is there to serve them, no matter their discipline. She explained, "If we were over in life sciences or something students would be like 'Oh, that's a science thing.'" The director of the LaunchPad echoed this interdisciplinary theme when she emphasized that she would not want the LaunchPad to move out of the library and went on to say, "The advantage of being at the library is everybody owns it."

Students also noted the centrality and interdisciplinary nature of the library when responding to the student survey. When asked to comment on how the location of the community in Bird Library helps or does not help with academics and/or their success as students, several students mentioned the library as a convenient central location to meet students from multiple disciplines. Comments included, "It is in a central location and it's a good middle ground to meet with anyone from around campus" and "Inclusive space for students all around campus."

In addition to highlighting the interdisciplinary nature of the library, the LaunchPad director mentioned appreciating the proximity of the SOURCE because of the synergy between the SOURCE and the LaunchPad. She sends students whose ventures have a research component to the SOURCE and the director of the SOURCE sends applicants "who are maybe not so research oriented and are maybe a little bit more, you know, venture oriented, she sends them to us. So, that's a really nice interplay."

This interplay between communities and the possibility of a student serendipitously discovering a resource in the library that they had not been seeking, but which could really benefit them, is something that, in the dean's words, makes the library space "well suited." He described a scenario where a student would "come to the library to study, you've never thought about tutoring or undergraduate research, or even knew what undergraduate research was and you bump into this glass cube on the second floor that's giving away money to do research."

Although student survey results suggest that discovering a community within the library is not the primary way students learn about these communities, some students nonetheless do find the communities in this way. In response to the question of how they learned about the LaunchPad, CLASS, or SOURCE communities, 5 of the 42 respondents to this question selected “Noticed the community in the library.” However, the majority of respondents indicated that they learned about the communities from their peers and other people or via email and social media.

#### Interdisciplinary Central Space Contributes to Engaged Community

Each director considers an engaged community essential. The director of SOURCE described an engaged community as occurring when students, faculty, and staff respect and enjoy conversation with one another, and “although they may be very different in what they believe in, they share some common goals or experiences.” She went on to state, “It’s very important because of that notion that research is part of a conversation.” The LaunchPad director described an engaged community as “the bedrock of who we are and what we do. And if we did not have an engaged community, we would not be delivering meaning and value.” Similarly, the director of CLASS emphasized the importance of an engaged community for recruiting “really strong students … a talented group of students to work with us.”

The LaunchPad and SOURCE directors each mentioned the importance of, in the SOURCE director’s words, “not [being] housed in a school or college.” The SOURCE director elaborated further, “We do bring together students from all disciplines and students learn how to talk about their work—biologist to artist, musician to political scientist—to find really interesting linkages between their work.” She described a five-year goal of “more directly supporting interdisciplinary research groups of students, pulling … students and faculty together from different disciplines around common topics like environment, education, areas that different disciplines can contribute to in different ways.”

This all suggests that, as a location for these communities, the library helps break down disciplinary borders by allowing participants to more easily meet and collaborate with students from other schools and colleges.

#### Challenges in Fostering an Engaged Virtual Community

When discussing the effects of the pandemic on their communities, the directors noted difficulty with building engaged communities in the absence of having the option to meet in person in their physical spaces. The director of CLASS stated that

the physical openness of their current space helps foster an engaged community, and that prior to the pandemic, they would have an event there every semester for peer workers to chat informally. Although CLASS had some success fostering community among smaller groups in online events, the director shared that “a broader sense of community is difficult to have in the virtual world.”

SOURCE’s director emphasized the importance of gathering in the same space for events such as “a reception with food where all the students would come and meet one another and mingle.” She mentioned the value of the libraries’ larger spaces and meeting rooms for gatherings such as poster sessions and a “Ted Talk event.” She also noted that it is “really challenging to foster an engaged community in the virtual environment.” The SOURCE did have some success with smaller groups during the pandemic. Students meeting weekly with a peer mentor “did bridge the loneliness and isolation students were experiencing.”

The director of the LaunchPad anticipated returning to full use of the community space after the pandemic, stating, “The students, they’ll talk about how much they miss that camaraderie and that physical being together.”

The preference for meeting in person in the community space was also reflected in the student survey. Of the 46 respondents who indicated how they would prefer to engage with the LaunchPad, CLASS, or SOURCE if COVID-19 were not a factor, all 46 preferred in-person, rather than virtual. The ranking of preferred frequency for in-person community engagement was weekly, followed by monthly, and then daily.

### *Supporting Diversity*

The community directors described diversity as essential to their missions. “Diverse students” and being “cross-cultural” were mentioned by the SOURCE and the LaunchPad, respectively when discussing their activities, staffing, and support. For example, the LaunchPad’s staffing model includes two part-time donor-funded student positions created to be “diversity and inclusion scholars” who work specifically on diversity, equity, and inclusion programming. The SOURCE requires “diversity, equity, inclusion, and research workshops,” for all grant recipients. In addition to having a “very diverse set of participants,” including “an overrepresentation of students of color and students who are Pell eligible,” the director of CLASS mentioned “working hard to recruit a diverse set of peers to hire and train” and described recent recruiting for a full-time staff position as a “diversity

and inclusion effort” that included participating in an online conference known to have a more diverse applicant pool.

The LaunchPad director explained that innovation and entrepreneurship programs are often competitive and historically have resided within distinct academic disciplines and schools or colleges on university campuses, such as the business school or the engineering school. In contrast, the LaunchPad presents “a highly collaborative model” within a building that is “purposely cross-disciplinary and cross-cultural,” which is “important because it mirrors the worlds you’ll be walking into.” She emphasized not only the interdisciplinary nature of the location (within the library), but the importance of its diversity, stating, “It’s a place on campus where you’re likely to meet people from five or six different academic departments working on solving a problem together, but also sit at a table with students from around the world. [This] makes it really unique. And I think that’s integral to what our community in our ecosystem is about.”

### *Mentoring*

While all three directors encourage informal mentoring as part of their communities’ activities, the SOURCE and CLASS both have formalized programs that hire part-time student employees as peer-mentors.

The SOURCE also works with 175 faculty mentors. The director emphasized that the community is “completely reliant on the labor of faculty to serve as mentors.” Though mentoring may at first glance appear unrelated to space, the SOURCE director noted that prior to the pandemic, students could drop in and talk with a peer mentor about challenges and get some advice. The director noted that such access to peers helps academically, since “overcoming challenges is one of the keys for academic success.”

Similarly, the LaunchPad plans to build a “mentor[ing] system so that students who come into the program are paired with alumni as mentors in a much more strategic way than what we’ve been doing over the last four years.” The LaunchPad director described the informal mentoring relationships among LaunchPad students as being, for those students, “the most memorable part of the program, being part of this collective enterprise to build together, to help each other, to mentor each other.” She added, “I think that’s one of the reasons that we have really engaged young alumni, because, when they leave, they miss that community, and they also want to pay it forward. So, our Founders Circle, which is our young alumni group, continues to stay really engaged as mentors.”

The CLASS director noted the strong relationships that a lot of students develop with tutors. She also emphasized CLASS staff as having “a strong skill set and also a very strong focus on and interest in supporting students. And not just in terms of grades and learning, but really, you know, whole students as people and knowing what’s going on in their lives and writing recommendation letters and listening.”

### *Academic Success and Life Skills*

All three directors believe their communities contribute to academic success, that the definition of academic success varies, and that it is best defined by each individual student. The SOURCE director described academic success as a state where students are “challenging themselves” and “perform[ing] at their personal best, whatever that may be.” By participating in research, students learn to “value their own independent thinking,” join “an ongoing conversation of scholarship in which they have a voice,” and become “contributor[s] to the production of knowledge,” which enhances their “sense of academic success.”

While CLASS contributes to academic success through the development of study skills, the director emphasized that there is no one definition of academic success and “it’s important to help students think about what it means to them” because it “can look different to students, depending on their goals.”

The director of the LaunchPad described her community’s contribution as follows, “I like to think that we’re part of academic success for many students who need something above and beyond a conventional academic framework.” She went on to say, “some of our students [have] told us we’ve been the thing that has kept them in college.”

Developing life skills (aka soft skills) emerged as a sub-theme in the director interviews, appearing to be closely tied to the communities’ programming and support of academic success. The director of SOURCE mentioned that conducting undergraduate research helps develop time management skills. The LaunchPad director anticipated an increased emphasis on developing “those personal skill sets to help ... navigate change” and gave an example of a student entrepreneur who, after struggling to find her fit during her first two years as an undergraduate, worked with the LaunchPad and “kind of came into her own as an entrepreneur ... learn[ing] those life skills that led her to (a) continuing on to get a master’s degree in Whitman and (b) getting named to Forbes 30 Under 30.”

The director of CLASS described tutoring and coaching as involving planning study strategies that focus on “how to learn really well,” and implementing “calendar and time management approaches.” She also described a new emphasis on mindfulness, first through piloting mindfulness workshops for smaller groups who requested it and then training a group of advanced peer coaches and tutors to lead two different mindfulness workshops, with registration open to all students. She described the mindfulness workshops as leading students in “using mindfulness to overcome the rather universal tendency for procrastination when it comes to completing more daunting academic assignments,” and “also using mindfulness to manage stress around exam prep and exam taking.”

On the student survey the majority (41 of 44) responded affirmatively to the question of whether engaging with the community (LaunchPad, CLASS, or SOURCE) helps with academics and/or their success as students. Comments mentioned how the community helps improve learning, studying, and grades, fosters confidence, and encourages collaboration. A few comments mentioned space directly such as, “This community helps me engage in my work in an environment where everyone is working so it’s most motivating,” and “Gave me confidence to be in a collaborative space and work through ideas which naturally leaked into my academic performance.”

Similarly, the majority (38 of 44) of those who responded to the question, “Does the fact that this community is located in Bird Library help with academics and/or your success as a student?” answered “Yes.” In their comments, several students noted the library as a convenient/central location and that being in an academic space encourages studying. A few students mentioned access to academic resources and services, as well as the proximity of many other students in the library. Comments included, “It helps because there are a lot of people studying and overall committed to academics from all different colleges” and “It helps being in a central location on campus and being in the library made me feel like I was doing productive work.”

### *Innovative Research, Creative Thinking, and Problem Solving*

In discussing innovative research, creative thinking, and problem solving, each director emphasized different elements of these concepts. The director of CLASS described problem solving as an integral element of what CLASS does, explaining, “If you’re not doing as well as you’d like to in a particular class, spending more time on the same study approach is not likely to be the route to success. Stepping back, being open to considering other ways of approaching the work is a lot more likely to be successful, and that’s a very important kind of problem-solving.” Although research is

not a focus for CLASS, the director shared how they are conducting innovative research via their IRB-approved coaching program that consists of an intervention with a curriculum developed by CLASS. Student participants are being encouraged, through the coaching program, “to make use of research and cognitive science on how human learning works.”

The director of the SOURCE considers innovative research to be “baked into our mission, and the core of what we do is encouraging that.” She described how every student who is “either engaging in their own project or working side-by-side with a faculty mentor” is engaging in innovative research. Examples include working with a professor on an urban food forest project, students developing their own research projects within STEM labs, and often being co-author on a publication with the PI of the lab. In discussing creative thinking, the SOURCE director said, “I think the way we try to frame and talk about research hopefully encourages students to think about it as both a sort of linear and creative process.” While discussing the community’s space in relation to innovative research, problem solving, and creative thinking, the SOURCE director emphasized the importance of gathering together in the same physical space, along with tools conducive to communicating with technology, and emphasized, “Really it’s the ability to sit and talk more than anything else.”

The LaunchPad director described customer discovery, which involves aspiring entrepreneurs interviewing numerous potential customers, as an innovative research process. She explained that students are “learning a lot of research and discovery skills, which help them test and validate assumptions, or learn how they need to pivot and change directions.” As to being located in the library, the director of the LaunchPad stated, “What faculty and program participants tell us that they like most about the LaunchPad [is] that you’re walking into this space that, first of all, is [in] a building dedicated to research and discovery and exploration.” Moving from describing the library more broadly to the specifics of the LaunchPad space, the director described how the space contributes to creative thinking, stating that “the physical space is great as a living lab, right? Aside from the fact that we have so many whiteboards, you can write on the glass with a dry erase marker. So just as a place to do design thinking and to literally sketch stuff out. It’s fantastic because, you know, you’ve got this big blank canvas to work on.”

The student survey found that students did engage with innovative research, problem solving, and creative thinking in the community spaces. A majority of respondents (39 of 45 who had selected a community) indicated engaging with these concepts “when visiting the community and participating in activities at the community in-person,

prior to the COVID-19 related physical/social distancing restrictions.” When asked to rate the adequacy of the community space for engaging with innovation/creativity/problem solving on a 1 (worst) to 5 (best) Likert scale, respondents seemed generally positive about the adequacy of the space, with the majority of respondents to this question rating the space adequacy as 3 or higher.

Several students shared examples of their projects and work related to innovation/creativity/problem solving. The following is representative of the type of projects mentioned, and echoes activities highlighted by the directors: “I participated in a Blackstone Launchpad event where we brainstormed and pitched a project idea in one weekend. I also attended a SOURCE event to learn about how to develop our project idea for our grant. Finally, I attended a CLASS workshop series on better study methods and time management.”

While libraries’ employee survey responses indicated that most interactions with the communities tended to fall under typical job responsibilities without direct connection to projects focused on innovation/creativity/problem solving, a couple of respondents did share examples of work with the communities related to these concepts. One respondent mentioned working with SOURCE students who are developing original research projects and remarked, “Students have to think critically about their research (solve the problem/be creative/innovative), come up with solutions, do literature searches, then write and present about their research.”

Interestingly, when students mentioned spaces in their comments on the student survey about work/projects related to innovation/creativity/problem solving, some students noted the community space, while others referred to library spaces more broadly. Comments included, “Working on startups, whiteboarding class material, simply sitting and doing work” and “I would spend countless hours studying material for certain courses. I would use the dry erase boards and the TV display to do work and try to be as productive as possible. I remember taking discrete mathematics and technical engineering courses, and using those spaces to really understand content material,” as well as “I was able to focus really well in the libraries and brainstorm in space I am not in all the time which led me to write well for class. Also, when doing group projects, I found that meeting in a library to discuss the project really was helpful for the process and allowed everyone to meet at a place we all knew,” and “I would go to Bird and Carnegie when I had to write an essay in order to get my creativity flowing in a quiet, serene place.” It seems that both community space and broader library space, as well as using spaces in a variety of ways (quiet space for focused work, space for meeting and collaborating, and using equipment, such as dry

erase boards and display monitors) came to mind when students were considering their projects and work related to innovative research, creative thinking, and problem solving.

## Communities' Current and Ideal Spaces

### *Directors' Perspectives on Important Space Elements*

When discussing their current community space, desired space improvements, and conceptualizations of what an ideal community space should include, the directors valued similar spatial features, such as flexibility and technology, and also expressed a universal desire for larger spaces. There were, however, differences and nuances that were specific to each community.

#### Flexibility

The director of the SOURCE described the “blend of different kinds of furniture” in the current space as being conducive to meetings with people seated around a conference table, as well as “more casual conversations,” such as when a student chooses to sit down on one of the “cozy couches” and talk with other students, SOURCE staff, or mentors. Flexibility and comfort were also important components of the ideal space, one where “flexibility would be key.” The space would contain “modular movable furniture that can be configured for a training session and moved around to foster small-group conversation” as well as “welcoming spatial features. Everybody wants a bright and well-lit space, of course.”

The director of CLASS also highlighted flexibility and comfort, stating that “it would have different types of configurations in the open area so that students could gather and study, and in different kinds of arrangements that they have some choice around, and that is comfortable and welcoming.” The space would “be a mix of some closed or semi-closed spaces and an open space,” and would include “one larger classroom” and “some smaller rooms.” This would allow for flexibility in “hosting different types of programs simultaneously without one negatively impacting the other.” It would also permit having “a review session, and also a regular set of regular small group tutoring sessions and some individual tutoring, and a mindfulness workshop, and everybody could still hear because they wouldn’t all be in one open space.”

The LaunchPad director described the current community space as being flexible and allowing for different activities, saying, “I mean the space is great. It’s flexible, it’s

sized just right. It works exactly for the way we want it to work, which is half a bit kind of teaching co-working, gathering space. And then the other half is staff, student team or coaching, counseling, mentoring space. And then we've got that little private [space], what we call the Bird's Nest cubby, for video calls and things that require just a little bit more privacy."

#### Technology

The SOURCE director noted "technology to help share screens and information" would continue to be essential as "almost every classroom and meeting space is going to need to be equipped for very easy Zooming in of people who aren't in a physical meeting, either because they're telecommuting staff, or they're a student out on a research trip." She also mentioned her ideal space would include a computer lab with specialized research software for workshops and student work. Similarly, the LaunchPad director would like to have "a media lab that was at the library that was open to all," and would include graphic design and computer modeling software. While she did not mention a need for specialized software for students, the CLASS director would like to have kiosks in the space for tracking activities. She explained, "We spend a lot of time right now trying to track who's doing what and where."

#### Privacy

Both the directors of the LaunchPad and the SOURCE noted the need for private space in any future ideal space plan. While the director of CLASS did not directly mention private space, she would like to create zones using sound baffling and partitions to allow for different activities to run simultaneously and stated that any future space plans would have a "mix of some closed or semi-closed spaces." The SOURCE director emphasized that SOURCE's current private spaces (one private conference room and one office) are essential and that such private spaces should be included in any future space planning. She explained, "I think there is a need for at least one private office ... for more private conversation, or a conversation that becomes emotional. [It] can be helpful to ... partially close a door if a student, you know students sometimes have sensitive issues that ... they need to talk through."

The director of the LaunchPad described a need for multiple private spaces, stating, "If you're a staff person working there, you better be able to tune out noise and commotion to be able to actually efficiently work ... Entrepreneurs have the energy and the attention span of preschoolers. So, you know, as a work environment, having a private office to occasionally escape to once in a while would not be a bad thing." She

also described how the one private space already in the LaunchPad had swiftly moved to a reservation system because students tended to monopolize it, wanting “the quiet to have meetings online or focus and work for 6–8 hours at a time.” She went on to say, “If we had one or two more private pods in there for work, that would be lovely. But I don’t know how you physically do that without taking away from the great co-working space that we have now.”

### *Students’ Perspectives on Community Space and Improvements*

The student survey suggests that students use community space for a wide variety of activities. Pre-COVID participation in activities reported by 45 respondents show that in-person meetings, team or group work, and individual work were the most popular at 17% each. These were followed by consulting with community experts/staff (13%), attending events (12%), and taking a break (11%). Attending a virtual meeting, taking a class, and working at the community as a student employee were each 5% or lower.

When asked to rate the adequacy of the community space for the above activities on a 1 (worst) to 5 (best) Likert scale, 18 of the 47 respondents to this question selected Not Applicable. Students who did rate the space were generally positive about its adequacy, as the majority of ratings were 3 or higher. Of respondents who rated the space, 34% selected 4, 30% selected 5, and 24% selected 3.

When asked about space improvements, students across communities indicated a need for more privacy for meetings (in-person, online, and phone), more outlets, and more tables and chairs for collaborative work. The top requests and level of need varied by community. The top four improvements selected by students engaged with CLASS were more outlets (73%), more tables and chairs for collaborative work (68%), less crowding in space (60%), and more privacy for meetings (59%). One student requested a whiteboard in a CLASS office.

Top improvements selected by LaunchPad students were more desktop computer workstations (84%), more tables and chairs for collaborative work (67%), more outlets (66%), and more privacy for meetings (66%). In the comments, two LaunchPad students indicated a need for Adobe’s Creative Suite on workstations, echoing the LaunchPad director’s mention of the need for specialized design software.

Students engaged with the SOURCE indicated less need for improvements overall. Of improvements selected by SOURCE students, the top ones were more outlets (55%), more privacy for meetings (44%), more tables and chairs for collaborative work (44%), and less crowding in space (38%).

The wide range of improvements requested seems to reflect the multiple and varied use of community space, from private meetings and individual study to collaborative group work. The popular request for more outlets suggests technology is threaded throughout many of these activities. It seems that both students and community directors value flexibility, technology, and privacy in community spaces, and could benefit from more space.

### *Communities' Space Expansion within and outside Bird Library*

The acknowledgement that any major space modifications would require more space, as well as additional funding, was a thread that ran throughout the directors' descriptions of desired space improvements and their conceptualizations of the ideal space for their communities. All three viewed the library as a good location for their communities. While the directors of CLASS and the LaunchPad described their larger ideal space as being within the library, the director of SOURCE described two possibilities for having a larger space: one a smaller scale expansion within the library and the other an ideal vision of being in a separate building, collocated with other similar partners.

The director of SOURCE described a potential space expansion within the library as including a larger conference room, one that can comfortably accommodate 15 students, and one more additional space for students to congregate as a group, as well as for a faculty mentor to meet with a team of student research assistants. The director then described the ideal space for SOURCE as being in a standalone separate building or "wing of a building." This building would be the home of academic success and academic excellence programs and would include "offices with similar missions" to the SOURCE, such as the McNair Scholars Program, the Louis Stokes Alliance for Minority Participation (LSAMP), and the Center for Fellowship and Scholarship Advising. The building would have "lots of meeting spaces, computer labs, [and] collaborative spaces." The director described the space as potentially being, "library adjacent ... or maybe there could be another branch of the library that opens up that supports all these places." This ideal space would address what the director described as one drawback of being in the library: "We are disconnected from other campus partners."

While being disconnected from other campus partners is a drawback, the SOURCE director described the alignment or "shared mission" with the libraries as a benefit, stating, "the library is the heart of research on this campus" and "the home of the ongoing scholarly conversation" and "that's a wonderful location for the SOURCE."

The directors of CLASS and of the LaunchPad also described the alignment of the mission of the library with the mission of their communities as being beneficial. According to the LaunchPad director, “The fact that it’s in the library and complements the library’s mission of research, discovery, exploration is really key to who we are, what we do, and how we do it.” Similarly, the CLASS director stated, “The presence of the books and the library, and the library personnel and the librarians, echoes and fits with our message—learning to be an expert independent learner.”

The other two directors also highlighted the proximity of library employees and resources as a benefit. The SOURCE director said, “It’s easier for them [students] to access the resources” when they are in the library. She then shared examples of directing students to library resources, such as telling a student to check out a journal related to their research or advising a student to “go meet with your subject specialist librarian,” something they could potentially do that day. The LaunchPad director described the benefit of the proximity to library resources this way: “It’s made us part of this bigger brain trust that is the library. And really smart, wonderful people and colleagues who really care about serving students.”

When the LaunchPad Director described an ideal space expansion for her community, she emphasized that the space would still be library space. She referenced a long-considered idea of connecting the adjacent Schine Student Center to Bird Library via a building between them when she described the ideal larger space as “a glass box somewhere between [the two] that the library owns. That’s my dream ‘dream.’” This structure would include—along with the previously mentioned coworking and teaching spaces, private pods and a media lab—a “TEDx style presentation venue that could accommodate up to 200 people for events.” The director of CLASS described this same location as being ideal for a larger CLASS space, adding that such a space would still be “kind of within the library.” She explained, “The purpose of the library, the fact that Bird is the main campus library and its location physically at the heart of campus. It’s really hard to beat.”

If building between Schine and Bird Library were not possible, the director of CLASS described a larger space expansion within the current library building as encompassing an entire floor of Bird Library. She envisioned the expansion as “having a big open space and parts of it having enclosed spaces, both smaller ones that would accommodate maybe four people, eight people, ten people, and a couple of classrooms that would accommodate maybe 125 and 150 … It would have a midsize and larger classroom. It would have quite a number of smaller rooms along the sides that … can

accommodate groups of anywhere from three to ten. And then it would have some open spaces in the middle. And, of course, we would need some ... staff spaces that would be part of that larger space too.”

In his interviews, the dean noted that the success of these communities, as they continue to grow staff and users, may lead to outgrowing their space. He referenced the space expansion of both CLASS and the LaunchPad within Bird Library as examples of this growth. If the libraries could not accommodate continued growth in the future, the expanding community would either need to “bifurcate” (have one location in Bird Library and one location in another academic building) or move out of the library. Although, as the dean noted, “Space is not easy to find on campus.”

The dean mentioned that the successful growth of these communities could contribute to “a more compelling case for expansion” of Bird Library into the “interstitial space” between Bird Library and the Schine Student Center. He described this “envisioned expansion of Bird Library” as being “student success focused” and benefiting the communities by allowing them to “custom design space from a blank slate,” rather than working within the “constraints of the building you’re carving out space in.” The dean noted that this space expansion would also benefit the libraries by opening up space in the current Bird Library building for other uses.

## **Impact of Communities on Bird Library Space**

At the libraries, space is at a premium and has been for several years. Even after moving significant numbers of books and periodicals to off-site storage, the stacks remain at capacity in Bird Library. Because it is the busiest academic building on campus, students sometimes have difficulty finding space to study during peak times, including the end of semester and during finals. Other surveys the libraries have conducted have revealed libraries’ staff concerns about space, including a need for improvements to their own offices and shared workspaces, as well as a need for more classroom spaces for library instruction and additional meeting rooms. This context is important when considering the impact of the communities on space in Bird Library.

In their interviews, the directors mentioned being aware of the impact their communities’ use of space may have on the libraries. The SOURCE director talked about looking forward to “reimagining how we use our current space in Bird Library to be the most effective and most savvy use of space. Because I do appreciate that our space is taking away from other things that could also be in the library. So, I am

cognizant that we are occupying square footage that can be used for other things. So, we want to make sure that it's being used to fulfill those mutual goals."

The director of CLASS mentioned a day-to-day partnership on space sharing, and an awareness of the impact CLASS's use of libraries' space has on the library, stating that there is "a lot of using spaces and then sometimes giving space back when that would be helpful to the library." She also noted the potential impact of CLASS on the libraries through mutual gathering and sharing of data to "look at what kinds of things draw students into the library. How does CLASS play a role there?"

When discussing how the LaunchPad's use of space impacts the library more broadly, the LaunchPad director said that the libraries' Department of Learning and Academic Engagement, which is located on the same floor as the LaunchPad, has been "terrific to work with" and she appreciates how the department "tolerates us," given how the LaunchPad "can be chaotic and noisy on the first floor." She described "a really strong collaboration with [the department] because we're on the first floor. We're part of their space. And, you know, what we do impacts them. Not just from the point of view of noise and commotion and sound, but also because we use that space a lot" for events like "Cuse Market, bazaars." She also mentioned using the large meeting room on the first floor "for all of our bigger events whether they're competitions or, you know, Fireside Chats, or book talks or things like that."

Each community was initially allocated space based on the community leadership's sense of need and potential for growth, however, the size of two of the three communities increased within their first three years. The Launchpad doubled in size, growing from 625 square feet to 1,490 square feet, an increase of 58%. CLASS tripled, growing from 625 square feet to 4,375 square feet, an increase of 86%. Established just prior to the pandemic in 1,131 square feet, SOURCE space has not increased. As highlighted by the directors' and dean's descriptions of potential space expansion, all three communities could still benefit from additional space.

The communities are situated in space that had primarily been used by students as study space, although some office space previously occupied by libraries' employees was reallocated as well to make room for a couple of the communities. The three communities together comprise approximately 3.24% of the total space in Bird Library and 7% of the open study space. This percentage is in line with respondents to the ARL-Assess email list survey, who reported the space of similar units as being evenly split between 5% or less, 6% to 15%, and 16% to 25% of total square footage in their

libraries. Three respondents indicated that the units used more than 25% of the total space.

All three communities are located on floors that are very busy student spaces that are open 24 hours a day during a typical semester. Community space percentages relative to the floor where the community resides vary. CLASS occupies 36% of the floor, or 50% of the open space on the lower level. The LaunchPad is on the first floor in a prominent location where it occupies 6% of the floor, or 8.7% of the open space. The SOURCE occupies 5.5% of the second floor, or 8.5% of the open space. CLASS opens most of its space for students to use as study space outside its hours of operation (8:00 a.m. to 9:30 p.m.) and whenever they are not holding tutoring sessions during those regular hours. The SOURCE and LaunchPad community spaces are not available for use by students who are unaffiliated with the communities. A chart comparing the communities' space percentages is available in [Appendix E](#).

For all the communities, these factors can result in students noticing empty and unavailable community spaces when they are having trouble finding study space. The potential loss of student study space as a result of locating the communities in Bird Library was partially mitigated by moving some collections to off-site storage and creating study areas elsewhere in the library. However, anecdotally, a few students who had become accustomed to using specific spaces for study, especially on the lower level, did not appreciate being displaced and brought their concerns to the attention of the libraries. The community spaces are not soundproof and, although none of the first three floors of Bird Library are officially designated as quiet floors, the second floor is one that students have self-defined as a quiet floor. At the SOURCE, this has resulted in occasional noise complaints from students studying on the second floor.

Libraries' employee thoughts on the impact of the communities on library space were primarily shared in response to a survey question about the drawbacks to the libraries and/or themselves as libraries' employees of locating the communities in Bird Library. The majority (21 of 24 respondents to this question) focused on the impact of the communities on library space, expressing concerns about the communities taking up increasing amounts of space that could be better used for libraries' needs, including employees' office/workspaces and meeting spaces, library instruction space, and student study space. There were also mentions of an outsized marketing and communications focus on the communities, in comparison to libraries' services.

Comments included, “I think the only drawback is the loss of space for other library needs, including staff office space and student study space,” as well as “Loss of space, loss of fundraising and marketing/communications efforts for the general library spaces, collections, and acquisitions,” and “Library resources and services can sometimes feel overshadowed by these communities.” One respondent, however, mentioned that despite “potential congestion, noise, litter, and conflicts over resources,” these issues were outweighed by the benefits. Other concerns expressed, along with space concerns, included alignment with the libraries’ mission and core values. One respondent mentioned that the LaunchPad’s focus on business creation “implicitly supports and reinforces capitalism,” while another respondent commented that the values of the broader Blackstone organization “directly contradict many of the values that libraries hold.” Three respondents stated that there were no drawbacks.

The space concerns expressed by libraries’ employees were similar to those mentioned by respondents to the ARL-Assess email list survey. When asked their perception of library staff opinion on the presence of the units in the library, the response was mixed, with 11 respondents indicating that staff had not expressed an opinion on the units, 6 indicating that library staff think the units belong in the library, and 6 indicating that library staff think the space could be better used if given back to the library. The comments related to space concerns included a sense that staff feel the space was taken without consideration for the library and that staff have space needs as well.

The dean of the libraries’ mentioned the “‘tension’ ... [of] need[ing] more space for staff.” He then discussed the issue of funding, as staff spaces “tend to be spaces we have to self-fund” and, although “not impossible, it’s easier to get outside funding, both from the university and from donors, for student success spaces than it is for offices.” He mentioned that “although we have managed to improve elements of staff spaces” there is a “need to spend some time looking more into staff spaces.” He said he was committed to this and that it “might mean more space, it might mean capturing more space, it may mean working more closely on the space we’ve got.”

## **Communities Collaborating with the Libraries and Using Libraries' Resources**

### *Communities Partnering and Collaborating with the Libraries*

When discussing partnering and collaborating with the libraries, all three directors expressed feeling welcomed and supported by the libraries, and each gave examples of collaborations with libraries' departments or staff, including space sharing in Bird Library. Notably, the director of the LaunchPad described more numerous collaborations and considered the libraries' support to be essential to the LaunchPad's success. These differences suggest a distinction between being a community located at the libraries and being a community that is organizationally part of the libraries, as the LaunchPad and its director report directly to the dean of the libraries.

The directors' discussion of the term partner/partnership between their units and the libraries also highlighted this distinction. While both the director of SOURCE and the director of CLASS consider partner/partnership to be, in the SOURCE director's words, "the most accurate descriptor" of their communities' relationship with the libraries, the director of the LaunchPad described "partner/partnership" as being a more formal relationship outlined in a shared document and stated that, although she uses the terms "partnership and collaboration interchangeably" in conversation, the LaunchPad does not "have those kinds of formal partnerships, except with the Blackstone Charitable Foundation and Techstars." The LaunchPad director also emphasized that, because the LaunchPad is organizationally part of the libraries, "We are fully, fully, fully part of the library, not an external unit at the library."

Before giving several examples of collaborations with the libraries' departments and employees (including advancement, budget, HR, marketing, Special Collections Research Center, Department of Learning and Academic Engagement, and subject librarians in the Department of Research and Scholarship), the LaunchPad director stated, "there's no way this program could have been successful unless we were truly part of the library and not just physically located at the library. And, the libraries' internal support for this program has just been extraordinary." She emphasized the importance of the LaunchPad's relationship with the dean's office stating, "The dean is still the academic PI and the academic champion for the program."

In discussing SOURCE's partnership with the libraries, the director said the term partner "makes sense because we are a distinct unit with a different reporting structure, but you know shared, have much in common with our missions." She also

appreciated “the ways in which the library staff and administration have consistently made me and the other library partners feel a part of the Libraries.” Examples of how the Libraries have made the SOURCE feel welcome include building “community among the library partners” by hosting a monthly partners meeting, showing interest in what the SOURCE does, and offering to market SOURCE events. The willingness of libraries’ IT to figure “out like weird things like how we can print to the poster printer downstairs, even though we’re on different ITS systems” was also mentioned. The SOURCE also collaborated with the libraries when a librarian provided instruction at student grant recipient orientation meetings. This was described as an activity that “very deliberately pulls in the library to make sure that they [the students] are aware of all the resources that they have as they embark on their projects.”

The director of CLASS described the partnership with the libraries as a “wonderful partnership on so many different levels … And I think the library staff … have been enormously supportive.” The CLASS director described collaborations such as end-of-semester activities that include librarians who can provide guidance on citation questions, doing marketing mutually, participating in information sharing with libraries’ advancement, marketing, and other administrators, including the dean of the libraries. In addition, CLASS staff sit on certain libraries’ committees.

This positive sense of partnership and collaboration is likely due, at least in part, to the dean’s efforts to include the communities. Throughout his interview, he emphasized the importance of welcoming the communities, with the dual goal of helping them learn about and “make the best use of our traditional library services” as well as ensuring that “they feel integrated into the library, that they’re of us, and not just in us.” He described taking the initiative to include the communities by listing them in the libraries’ staff directory and inviting them to participate in libraries’ activities, such as all-staff meetings and holiday parties. As he described it, “if the services are working and they’re on mission, I think it’s a mistake to think of them as separate. Our users don’t. You know, our users don’t come to SOURCE and say, ‘I know you’re not really part of the library, but I still want to come in.’”

While some respondents to the libraries’ employees’ survey mentioned and gave examples of interacting with the communities, several respondents noted a lack of “an integrated relationship” between the communities and the libraries,” resulting in the sense that they are “separate stores in a mall” that “exist on their own and have their own unique constituents.” One respondent mentioned that the presence of the communities sometimes causes confusion among users about the services offered by the libraries, such as “patrons thinking we [library staff] can help with tutoring.”

Another respondent wrote, “I constantly have to translate what these [community] services mean into plain language for students and faculty alike.” In another comment, a different respondent suggested a more nuanced message about how the communities relate to the libraries, noting the “they are part of us” message as being “a little too simplified” and suggesting that calling the communities “residents in our building … would still leave us open to connect and collaborate with them.” Another respondent was hopeful that some staff might “see or enjoy some kind of interaction” with the communities.

### *Communities’ Usage of Libraries’ Resources and Services*

A review of survey results and usage data provides insight into frequency of interactions between libraries’ employees and community members, as well as community members’ use of libraries’ resources.

When given the option on the student survey to indicate how often (daily, weekly, monthly, rarely, or never) respondents interacted with libraries’ staff, as well as (via a separate question) how often they used library resources, responses were weighted towards the monthly to never end of the spectrum, with rarely and never being the most popular selections. The top resources respondents indicated using most often were online resources, team rooms, other spaces in Bird or Carnegie Libraries, and technology.

This relatively low rate of interaction with libraries’ staff and use of libraries’ resources was mirrored in the survey of libraries’ employees. Asked about the impact of the communities on their own work, 65% reported neither positive nor negative impact, with the balance being slightly more negative than positive. Respondents indicated that they spent 10% or less of their time engaging with the communities and that their level of engagement was dependent on job responsibilities.

When asked how often (daily, weekly, monthly, rarely, or never) they interacted with members of the communities, rarely was the most popular selection, followed by never, weekly, daily, and monthly (in that order). When indicating types of interactions with community members, most respondents selected rarely, followed by never, and then monthly for circulation; directional and research questions; troubleshooting online resources or other technology; and providing instruction sessions. Daily and weekly interactions were most often reported as occurring around community events and meetings.

For context, when respondents to the ARL-Assess email list survey were asked to estimate the level of interaction between units in their libraries and library staff, 43% described it as moderate, with reference and help desk questions the most common. Nearly 29% selected major levels of interaction that included jointly planning events as well as holding workshops and presentations. Finally, nearly 29% reported minimal interactions.

At the close of fiscal year 2019, community members' use of the libraries' resources was compared to that of the general student population. Overall, community members used library resources on average 5% more than students not involved with the communities. A chart comparing the communities' usage of libraries' resources is in **Appendix F**. Additionally, just outside the LaunchPad is a small subcollection (about 300 titles) of the many entrepreneurship and innovation related books available via the libraries. A previous comparison of circulation statistics found that books from this subcollection circulated at a measurably higher rate than the libraries' average circulation rate.

Although the surveys of community participants and libraries' employees suggest a low frequency of interaction with libraries' staff and use of libraries' resources, the usage data suggests that locating communities within the libraries somewhat increases community members' awareness of services and resources, resulting in a slight increase in community members' use of libraries' resources.

Overall, student survey respondents indicated they could find the libraries' resources they needed, that libraries' staff were welcoming and helpful, and that the space of the community, as well as other libraries' spaces were conducive to their activities. On a 1 (strongly disagree) to 5 (strongly agree) Likert scale, the average rating for these questions combined was as follows: 45% of CLASS respondents rated these as 4, followed by 27% who rated these as 5; 43% of LaunchPad respondents rated these as 5, followed by 20% who rated these as 4; 50% of SOURCE respondents rated these as 4, followed by 25% who rated these as 5. When the community affiliation was not considered, 40% of respondents rated these as 4, followed by 31% who rated these as 5.

## **Benefits of Communities for the Libraries**

### *Employee Perspectives on Benefits*

When libraries' employees were given the opportunity to comment on the benefits to the libraries and/or themselves (as libraries' employees) of having the SOURCE, CLASS, and LaunchPad communities in Bird Library, many of the 22 comments mentioned positive benefits, such as increased visibility for the libraries and its services, as well as more "cache with the university." According to one respondent, the communities "offer an expanding and evolving view of the notion of 'libraries' beyond being just a source for information and quiet study. They build a more diverse community and attract participation from almost every point of campus and the student population." The benefit of the communities for students was also mentioned in several comments. However, comments included concerns about the alignment of the communities with the libraries and whether the libraries' feelings towards them are reciprocal. The changing nature of libraries was also noted. Four respondents stated that the presence of the communities in Bird Library offered no benefit to themselves or to the libraries.

### *Dean's Perspective on Benefits*

The dean of the libraries described several benefits of locating the communities in Bird Library. Beyond bringing in financial resources, such as university funding to renovate and remediate library spaces, having such communities in Bird Library raises the profile of the libraries on campus and to university administration by showing the libraries are "relevant and of service in areas that the university community finds important." The dean described the presence of the communities as making "us a richer service landscape" and opening the libraries up to campus in a sort of virtuous circle, one where students discover new library and community resources in the same space and one where "we're seen now as active partners on campus in various ways and strategic assets." According to the dean, providing space for these communities has led to the libraries being "asked early to be involved" in campus initiatives and has resulted in the libraries being "seen on campus in a different light" as "the campus sees us growing in new directions, innovating, trying out new things."

As the dean described it, telling the story of having these communities within the libraries is one way the libraries "can reflect back, if only to our campus and our alumni, what we're up to. And there is a certain, 'It's in the library, really?' factor that is a positive one." He also said that the communities provide "closer connections to

some of our students,” allowing the libraries to get “to know their stories.” One benefit of this connection, as described by the dean, is the ease with which the libraries can provide anecdotal yet compelling evidence of impact through the stories of students who are involved with the communities. The dean stated, “Between the SOURCE and CLASS, we’re getting a steady number of students who, when we need a student to talk about the impact of the library, we know where we’re going to get one,” which can be especially helpful when “fundraising and talking to an alum.”

The dean described “LaunchPad activity [as being] a magnet for alumni engagement,” due in part to its success and in part to LaunchPad students reaching out for mentors in business. The dean explained that many alums “want to come back and tell their entrepreneurship story” or “really want to support students directly ... with their particular expertise. And that’s led to significant funding coming our way.” Beyond fundraising, the dean described students who graduate and stay engaged with a community as being “a visible sign of success.” As one example, he mentioned the LaunchPad’s Founders Circle, which consists of alums who “want to talk about the impact the library and the university had on them,” as well as serving as mentors for current students at the LaunchPad.

## Perspectives on Measuring Impact

### *Dean’s Perspective on Measuring Impact*

In discussing measuring the impact of the communities, the dean said, “It may be that these new services and our growing assessment ambitions and hopes for an assessment culture come together at a good time now to really think about more broadly, ‘How can we assess the impacts we have?’” He described how these new services “tend to want to demonstrate their value” and are doing so in a variety of ways, such as collecting data on startup funding and patents filed (LaunchPad), “patterns that emerge from students who get tutoring and the students in the same area who don’t” (CLASS), student research projects funded (SOURCE), as well as collecting stories that “put a human voice to the impacts of [these] services.”

The dean noted that academic libraries are “getting much better at looking at those areas where we can measure the difference that we make” and expressed hope of learning “about measuring outcomes [from the new services] that may even translate” to measuring the impact of library services. He mentioned informal stories of student success gathered in “interviews and anecdotes” as continuing to be powerful, even

among the more formal measures. He also noted that surveys of student community participants could provide insight into the impact of the communities and the library.

When asked to recommend metrics for ARL to consider including on its annual survey in order to measure the impact of these and similar communities, the dean emphasized that, although numbers are important and “do tell part of the story,” libraries should continue to “press ourselves to move on from just those numbers.” He also noted that some measures of impact will not scale because they are unique to specific communities. For example, he mentioned the number of dollars raised by aspiring student entrepreneurs as being a measure unique to an entrepreneurship center. However, he noted that the communities could provide their own unique “top five” metrics, which would be valuable, although not scalable at the ARL level.

With these caveats in mind, the dean suggested the following metrics as ones for ARL to consider:

- Square footage of community as percentage of library space
- Staffing levels of the communities
- Community participation:
  - Number of community participants
  - Number of repeat community participants
  - Measure of intensity of participation
  - Number of community participants who stay engaged with the community/return as community mentors
- University investments in the library to support the community (e.g., funding for library renovations, new library budget lines/staff positions)
- External dollars raised through community focused fundraising as a percentage of total library philanthropy

### *Employee Perspectives on Measuring Impact*

Given the opportunity to share thoughts on “how SU Libraries might measure the impact (quantitatively and/or qualitatively)” of the LaunchPad, SOURCE, and CLASS, respondents to the employee survey offered a number of comments. Suggestions included measuring “philanthropic dollars raised”; comparing gate counts before and after the arrival of the communities; tracking the number of community members who go on to use libraries’ resources; surveying community participants about the impact of the communities and the libraries on their student work/projects; and surveying libraries’ staff to gauge their perceptions of the communities (as well as the impact of

the communities on their own workspaces and work environment). Respondents also suggested asking the communities for meaningful metrics, with two respondents indicating that the libraries should be more focused on measuring the impact of the libraries than on measuring the impact of the communities.

## Recommendations

Based on our findings, we have a few recommendations for Syracuse University Libraries, other academic libraries, and ARL to consider, along with recommendations for future research.

### Recommendations for Syracuse University Libraries

While our findings indicate that community directors and students consider community space to be adequate and conducive to their activities, they also indicate that the communities could benefit from space improvements. If the libraries were to be in a position to make improvements to community space, the suggestions in the “[Communities’ Current and Ideal Spaces](#)” section could serve as a starting point for discussions with the communities and lead to further exploration of community space needs.

Our findings also indicate that discussing and addressing the space needs of libraries’ employees remains an ongoing concern that impacts community perception among staff. Libraries’ staff space needs, as well as student study space needs, were mentioned in comments throughout the employee survey. Employee survey respondents considered these space needs to be the primary drawback to locating the communities in the library. This suggests that addressing employee space needs would help to lessen a perceived negative impact of locating the communities in the libraries. In the long term, both the communities and the libraries could benefit from more space.

Our findings also suggest that more open communication and discussion with libraries’ employees about the communities would be beneficial. Increased listening to employee perspectives could provide insight into factors contributing to employees’ sense of a lack of integration between the communities and the libraries. Employee perspectives could also inform the development of more nuanced messaging around how the communities relate to the libraries, helping patrons better understand the

distinction between the services offered by the libraries and the unique services provided by the communities.

When considering potentially offering space to more units (such as the communities featured in this report) in the future, consideration should be given to mission alignment, the need for central academic space, funding, and impact on student study and staff spaces, among other factors. Libraries' staff should also be brought into the conversation as early as possible so that their perspectives and the potential impact of the units' presence on their work and spaces may be more fully understood.

## Recommendations for Other Academic Libraries

When considering bringing in new units to library spaces, we hope that other academic libraries will learn from this study of the impact of locating units (in this case, three distinct academic learning communities) at Syracuse University Libraries. Other libraries may want to consider potential benefits and drawbacks to the units and to the library, along with mission alignment, need for interdisciplinary central space, potential for repurposing space (should the unit ever relocate), the unique activities and related space needs of the unit, and the possibility that the unit may need more space in the near future.

The potential impact on other library activities, such as student study space and employee spaces should also be considered. Additionally, we recommend facilitating open communication and conversations with library employees early on during the decision-making process, throughout the course of locating a new unit in the library, and in follow-up discussions once the unit has been established in the library. Ideas for welcoming a newly established unit into the life of the library and building upon a sense of partnership may be found in the report subsection "[Communities Partnering and Collaborating with the Library](#)."

## Metrics Recommendations for ARL

Annual reporting, the foundation for current ARL statistics, requires each participating library to have developed a sustainable data gathering and analysis process. This contrasts with the former ARL SPEC survey approach for more in-depth research on specific topics, which (like this study) were voluntary "one-off" projects. Were ARL to adopt qualitative social science research measures as part of its annual statistics, libraries would need to develop ways to make such research operational,

which would most likely require developing and sustaining internal expertise in both quantitative and qualitative research methodologies and analysis.

Moreover, moving to robust qualitative measures about space impact that could also be generalized for many institutions could pose challenges beyond staffing and expertise. Our findings are highly contextual to Syracuse University Libraries' physical and organizational settings, and we would not suggest that our findings apply universally. Discovering more generalizable findings probably would require studying multiple units/communities embedded in multiple academic libraries. For ARL to gather data from its full membership like that from this study would require more standardized definitions and methods. When considering developing and sustaining standardized processes for collecting qualitative data over time, ARL and its member libraries should carefully consider the time commitment and expertise this shift would require.

Attempting to answer the question of how library spaces facilitate innovative research, creative thinking, and problem solving and/or conducting a holistic study of the bidirectional impact of units/communities embedded in academic libraries are efforts likely too complex for an annual survey, due to the qualitative methodologies that would need to be applied, plus the external data sources required from the registrar and other student support offices. However, ARL already collects numerous metrics as part of its annual *ARL Statistics* that could be adapted to create a baseline for measuring the impact of communities (or other types of units) in libraries. As compiling data to answer the survey already has a significant organizational impact, it is important not to add unduly to that process. For that reason, further breakouts to existing questions is one approach worth considering.

The survey, however, focuses on library collections, staffing, and services. We therefore first suggest general questions around the footprint of the communities, then an additional focus on the communities reporting to the library. If the communities that do not report to the library are willing to share more information, their responses could also be included. This tiered approach would not capture the total impact on the library, but would be more sustainable in the long term, as some communities may have their own metrics and may not want to add more or may be reluctant to share data.

Sample questions could include:

- Number of communities total; number reporting to library
- Square footage of all communities as percentage of public (non-collections) library space; percentage of those reporting to library
- Number of community staff total; number reporting to library, level of position, salaries/wages if reporting to library
- Income from donations and grants in support of communities; percentage of total library philanthropy
- Expenditures in support of community as part of operating; expenditures as part of wages and salaries
- Funds received from the university for space improvements to support communities reporting to the library; funds received for space improvements to support communities not reporting to the library
- Number of instructional presentations to communities; number of students in presentations
- Total number of students engaged with communities (if known); total number of students engaged with those communities reporting to the library

## Recommendations for Future Research

When considering the ARL Research Library Impact Framework initiative question that led to this study, our research findings offer context and insight, but no definitive answer to the question “(How) do library spaces facilitate innovative research, creative thinking, and problem solving?” However, below is a summary of key findings focused on how the activities of the three communities studied (CLASS, LaunchPad, SOURCE) relate to their use of space.

We learned that community space is used in a variety of ways (for private meetings, individual study, collaborative group work, etc.) and that community participants and community directors value flexibility, technology, and privacy in community spaces. While directors and participants deemed their community spaces to be adequate and conducive to their activities, there were (across communities) varying levels of need for more privacy for meetings (in-person, online, and phone), more outlets, more tables and chairs for collaborative work, and more space.

When focusing on the connection between space and innovation/creativity/problem solving, we found most respondents to the student survey engaged with these concepts in the community space and they seemed generally positive about the

adequacy of the community space for their work and projects related to these concepts. Notably, in follow-up comments students mentioned community space and broader library spaces, along with using space in a variety of ways, indicating use of a wide range of community and library spaces when working on projects related to innovative research, creative thinking, and problem solving.

In reflecting on the unanticipated challenge of switching to entirely online operations (followed by a very limited use of space for some of the communities) during the height of the COVID-19 pandemic, the directors made it clear that meeting together in the same physical space supports their communities' activities, helping to advance their missions and goals. Sharing the same physical space seemed to be especially important when fostering an engaged community, a goal shared by all of the directors. Community participants also seemed to value space, as they expressed a universal preference for meeting in person in the community space, as compared to engaging with the community virtually.

Through our research, we also gained insight into the value of the library as a central and interdisciplinary academic space for the communities. As noted in our findings, as a location for the communities it seems that the library helps break down disciplinary borders by allowing community participants to more easily meet and collaborate with students from other schools and colleges. Furthermore, as an interdisciplinary space dedicated to research and discovery, the directors viewed the library as complementing and supporting their communities' missions.

Community participants affirmed that engaging with the community helps with academics and/or their success as students. They also affirmed that the library as a location for the community helps with their academics and/or their success as students. In the words of one respondent the library “helps because there are a lot of people studying and overall committed to academics from all different colleges.”

There are any number of lines of research that could be pursued based on these preliminary findings, from delving into the factors that contribute to fostering engaged community to better understanding *how* the library as place helps community participants succeed academically to other academic libraries investigating the reciprocal impact of communities located in their own libraries.

Although students are connected through numerous digital activities and communities, our findings suggest that bringing students together in person in a defined space for shared activities and interactions with a diverse range of mentors

and peers helps distinct academic learning communities further their goals. This happens, as we learned, through their use of space in the library to foster a sense of engaged community and support other positive community and academic outcomes. Directors and community participants seemed to value the library as a central, interdisciplinary, academic place for their communities, with the directors perceiving the library as complementing and supporting their missions and activities. Further exploring the benefits of the library as place (or home) for similar types of communities embedded in academic libraries is a line of research that could help elucidate the value communities derive from being housed within a library. That in turn could help libraries better communicate their own impact to their institutions.

For researchers who wish to pick up the question “(How) do library spaces facilitate innovative research, creative thinking, and problem solving?,” we would recommend using more direct methods in addition to, or perhaps in place of, the methods (interviews and surveys) used by our team. Our research was conducted during a time of disconnection from our spaces. Under better circumstances, we think that direct observation of community participants in their community spaces, and conducting focus groups with participants, would have provided more details about their use of space, as well as insight into *how* certain spatial elements facilitate innovative research, creative thinking, and problem solving.

Additionally, we would encourage researchers to consider how students and library employees from underrepresented groups may have different experiences in and perceptions of community and library spaces. Given our relatively small community participant and employee survey populations, we were deliberately broad in the demographic information collected and did not collect information about race, ethnicity, gender, sexual orientation, or disability. We recommend researchers explore studies focused on the experiences of underrepresented groups in libraries, such as Duke University Libraries’ research with Black undergraduate and graduate students, when developing research goals and objectives and selecting methodologies.<sup>21</sup>

## **Resources Required**

1. Our team consisted of four individuals: two senior administrators, and two librarians
  - Terriruth Carrier, Executive Director of Operational Excellence

- Stephanie J. H. McReynolds, Librarian for Business, Management, and Entrepreneurship (Project Lead/Principal Investigator)
- Peter D. Verheyen, Librarian/Research and Emerging Issues Analyst
- Scott Warren, Associate Dean for Research Excellence

2. External individuals consulted were:

- Sue Baughman, ARL Staff Liaison to the Research Library Impact Framework
- Greg Davis, Assistant Director of Assessment and Planning at Iowa State University and Visiting Program Officer for Teams in the Spaces Question of the Research Library Impact Framework
- Kevin Fomalont, Data Consultant to the Research Library Impact Framework
- Margaret R. Roller, Social Scientist Consultant to the Research Library Impact Framework

Baughman and Davis provided guidance on the ARL Research Library Impact Framework initiative guidelines, expectations, timelines, resources, and related questions. Through guidance and training, Roller and Fomalont helped expand the team's knowledge of qualitative and quantitative research methods.

3. ARL/IMLS grant subaward funding

This funding was used to encourage participation in the student and employee surveys by offering survey respondents the chance to win gift cards in raffles. A total of \$1,400 was received to fund gift cards: \$700 for the student/alum survey and \$700 for the employee survey.

4. Infrastructure

- Research data created as part of this project (the surveys and interviews) required a secure drive space on a Syracuse University server so that all files created could be kept confidential.
- Qualtrics and Tableau (both licensed by Syracuse University) were used to conduct the surveys and organize responses.
- Working remotely for most of this project necessitated making extensive use of communication tools available via Google Drive, Microsoft Teams, and Zoom (all licensed by Syracuse University).
- Automatic machine captioning through Syracuse University's standard licensing and configuration of Zoom and Kaltura made generating transcripts of the community director and library dean interviews possible.

## **Lessons Learned**

As we moved through our project, several lessons became clear. These observations center on project processes, labor, and team expertise.

First, libraries who engage in research projects should spend adequate time up front to fully clarify their research aims and objectives as early as possible. Everything else flows from those decisions. Additionally, reaching a firm and clearly articulated decision about the scope of the project is also a major decision point that will influence everything that comes after. In our case, we all agreed to expand our study from its initial target of just one academic learning community embedded within the libraries to three. This afforded us the opportunity to explore whether findings from the different communities would reinforce and/or contrast with one another. It also, however, greatly increased the scale of our project.

Second, team expertise should be carefully considered before embarking on a research project. Without expertise in qualitative research, team members needed to develop a rudimentary understanding of these methodologies and processes. While difficult when combined with already stretched resources, never mind a pandemic, the skills and understandings acquired will inform future projects.

If a library or team would like to explore a qualitative research method new to them, we recommend trying just one method at a time on a smaller project to see how it goes. By contrast, on our first foray, we conducted multiple interviews and created three extensive surveys. While that may not seem like much, even that level was time intensive. Each part of the process required learning something new, from designing qualitative survey and interview questions, to understanding Institutional Review Board (IRB) and the Office of Sponsored Programs' expectations and completing the proper forms to receive approvals from IRB and Sponsored Programs, to learning approaches for analyzing qualitative data. In our experience, learning multiple research methods while simultaneously implementing those same methods is not recommended.

We learned that conducting even basic qualitative research involves significant time investment and is notably different from the survey research and quantitative methods that libraries tend to depend upon. It also involves skill sets that many librarians or professionals in libraries do not possess, in part because such knowledge and experience tend to result from extensive methodological training that primarily occurs in PhD programs in the social sciences. Depending on the level of staff

expertise, libraries planning a research project may want to consider outsourcing by contracting with research consultants, who may advise on research methods and/or conduct part (or all) of the research. While perhaps advisable from a staffing viewpoint, this would potentially introduce considerable additional costs.

Based on our experience, running a sustainable qualitative research program is going to be challenging if built upon part-time contributions from staff not trained in the appropriate research methodologies. If a library were to commit to undertaking this type of research long term, fully investing in the necessary staffing, expertise, and skills development would be essential.

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## Appendices

### Appendix A: Survey Instruments

#### *ARL-Assess Email List Survey*

1. Introduction and Consent Form
2. Are there traditionally non-library or other campus units that are based in your library (e.g., tutoring, writing center, research, teaching excellence)? A) Yes, B) No
3. If yes, please list/describe the main functions of these units generically. No formal unit names or any other identifiable (personal or institutional) information, please.
4. Do any of these traditionally non-library or other campus units within the library report directly to the library? In other words, are any of these units a formal part of the library's organizational structure? A) Yes, B) No
5. If yes, which ones report directly to the library? Please list/describe the main functions of these units generically. No formal unit names or any other identifiable (personal or institutional) information, please.
6. What is the estimated total percentage of library space occupied by traditionally non-library or other campus units? A) 5% or less, B) 6%–15%, C) 16%–25%, D) More than 25%, E) Other
7. If you selected Other, please describe here.
8. How did these traditionally non-library or other campus units come to reside within the library space? Check all that apply. A) Mutual agreement between the library and the traditionally non-library or other campus unit because of natural synergy between the unit and the library, B) Invitation from library administration to the traditionally non-library or other campus unit because the library had space available and knew the unit needed a place, C) Decision was made by university (not library) administration, D) Not sure, E) Other circumstances
9. If you selected "other circumstances," please explain without listing formal unit names or any other identifiable (personal or institutional) information.
10. Are these traditionally non-library or other campus units expected to be in the library permanently? A) Yes, B) No, C) Some are expected to be in the library temporarily and some are expected to be in the library permanently

11. What kind of interaction do library staff have with these traditionally non-library or other campus units? A) Major interaction: library staff plan events together, and work on workshops and presentations for these units, B) Moderate interaction: primarily reference and help desk work with the students, faculty, and staff these units serve, C) Minimal interaction
12. If some have major interaction but others have minor, can you list the traditionally non-library or other campus units that have major interaction with library staff? Please list/describe the main functions of these units generically. No formal unit names or any other identifiable (personal or institutional) information, please.
13. If some traditionally non-library or other campus units located in the library have major interaction with library staff, what do you think contributes to that increased interaction? A) Significant overlap in goals and services, B) Physical proximity to service point (such as reference/help desk) or library staff office space, C) Other factors
14. If other factors, please explain without listing formal unit names or any other identifiable (personal or institutional) information.
15. What is your perception of how library staff feel about having these traditionally non-library or other campus units within the library? A) Library staff feel that these units belong in the library, B) Library staff have not voiced a strong opinion about the presence of these units within the library, C) Library staff feel that the space these units take up could be better used if given back to the library
16. Comments related to library staff perceptions about having these traditionally non-library or other campus units within the library.
17. Do you expect your library to bring in more of these traditionally non-library or other campus units? A) I expect to see more sharing of space in the future, B) I think our library is sharing as much space as we can at this point, C) I think that some of the space we are currently sharing could be better used if given back to the library
18. If you have any thoughts on how library space is used and may be used in the future or how a temporary lack of space (due to COVID-19 related changes) has affected your thinking about library space and sharing space with traditionally non-library or other campus units, please share your opinion. No formal unit names or any other identifiable (personal or institutional) information, please.
19. Which of the following best describes you? A) Library Director or Dean, B) Associate University Librarian or Associate/Assistant Dean, C) Department Head, D) Assessment Librarian, E) Librarian, F) Staff, G) Other
20. ARL member library? A) Yes, B) No
21. Is there anything else you would like us to know?

## *Student/Alum Survey*

1. Introduction and Consent Form
2. Which communities do you engage with at the Libraries? Select all that apply. A) Blackstone LaunchPad powered by Techstars (LaunchPad), B) Center for Learning and Student Success (CLASS), C) Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE)
3. How did you learn about the community or communities you selected above? Select all that apply. A) Via email, Syracuse University news, or social media, B) On Syracuse University website, C) From friends, professor(s), in class, etc., D) From library staff, E) Noticed community in the library, F) Other/Comment
4. I most often engage with... All further questions will be based on this selection. A) LaunchPad, B) CLASS, C) SOURCE
5. Before the COVID-19 related physical/social distancing restrictions were put in place, I visited: Listed in column: In Person, Virtually, Other. Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
6. I would prefer to engage (if COVID-19 were not a factor): Listed in column: In Person, Virtually, Other. Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
7. When visiting the community in-person prior to the COVID-19 related physical/social distancing restrictions, I participated in the following activities. Check all that apply. A) Team project or group work/study, B) Individual work/study, C) In-person meeting, D) Online or phone meeting, E) Consulting with community staff and/or experts (for example, mentoring/coaching, tutoring/academic coaching, research/project guidance, etc.), F) Taking a break/passing time, G) Taking a class, H) Attending an event (for example, workshop, discussion, speaker series, group tutoring session, business competition, etc.), I) Working at the community (student worker/staff), J) Other
8. When visiting the community in-person prior to the COVID-19 related physical/social distancing restrictions, I would rate the adequacy of the space from 1 (worst) to 5 (best) for the following activities. Listed in column: Team project or group work/study; Individual work/study; In-person meeting; Online or phone meeting; Consulting with community staff and/or experts (for example, mentoring/coaching, tutoring/academic coaching, research/project guidance, etc.); Taking a break/passing time; Taking a class; Attending an event (for example, workshop, discussion, speaker series, group tutoring session, business competition, etc.); Working at the community (student worker/staff); Other. In header row: 1 (worst) to 5 (best) Likert scale.

9. When visiting the community and participating in activities at the community in-person, prior to the COVID-19 related physical/social distancing restrictions, I engaged in the following. Select all that apply. A) Innovation (for example, innovation and entrepreneurship experiences, improving one's product or business idea, research/innovative research, trying new approaches, etc.), B) Creativity (for example, creative thinking/brainstorming/writing, making/adapting creative work, producing something new/novel, etc.); C) Problem Solving (for example, trying a different study method to boost one's retention of course content, finding a way to improve class performance/grades, finding a way to increase learning and understanding of difficult concepts, improving communication with professor/mentor/team, revising project plan or paper to better organize and communicate ideas, etc.).
10. Please share some specifics from your projects and work that can speak to those concepts in the previous question (repeated here): Innovation (for example, innovation and entrepreneurship experiences, improving one's product or business idea, research/innovative research, trying new approaches, etc.); Creativity (for example, creative thinking/brainstorming/writing, making/adapting creative work, producing something new/novel, etc.); Problem Solving (for example, trying a different study method to boost one's retention of course content, finding a way to improve class performance/grades, finding a way to increase learning and understanding of difficult concepts, improving communication with professor/mentor/team, revising project plan or paper to better organize and communicate ideas, etc.).
11. When visiting the community in person, prior to the COVID-19 related physical/social distancing restrictions, I would rate the adequacy of the space from 1 (worst) to 5 (best) for engaging with the following: Listed in column: Innovation (for example, innovation and entrepreneurship experiences, improving one's product or business idea, research/innovative research, trying new approaches, etc.); Creativity (for example, creative thinking/brainstorming/writing, making/adapting creative work, producing something new/novel, etc.); Problem Solving (for example, trying a different study method to boost one's retention of course content, finding a way to improve class performance/grades, finding a way to increase learning and understanding of difficult concepts, improving communication with professor/mentor/team, revising project plan or paper to better organize and communicate ideas, etc.). In header row: 1 (worst) to 5 (best) Likert scale.
12. For each of the following adjective pairs, please respond to the statement by checking the box in the appropriate column. When visiting the community in

person, prior to the COVID-19 related physical/social distancing restrictions, the space felt [for each adjective pair, the respondent could check one of five boxes between the two adjectives, indicating how they felt about the space]: Adjective Pairs—Pleasant/Unpleasant; Energetic/Calm; Quiet/Noisy; Playful/Serious; Social/Unsocial; Collaborative/Self-Reliant; Public/Private; Informal/Formal; Friendly/Unfriendly; Crowded/Uncrowded; Exciting/Gloomy.

13. Ideally, I wish the community would feel [for each adjective pair, the respondent could check one of five boxes between the two adjectives, indicating how they wish the space would feel]: Adjective Pairs—Pleasant/Unpleasant; Energetic/Calm; Quiet/Noisy; Playful/Serious; Social/Unsocial; Collaborative/Self-Reliant; Public/Private; Informal/Formal; Friendly/Unfriendly; Crowded/Uncrowded; Exciting/Gloomy.
14. The following changes to the community's space would improve my experience and activities in the space and I would rate the need for improvements as follows. Listed in column: More privacy for meetings (in-person, online, and phone), More desktop computer workstations, More display monitors to connect to, More outlets, More tables and chairs for collaborative work, Less crowding in space, Different furniture configuration, Other changes (please describe, e.g., specific furnishing). Selections listed in header row: A) No Need, B) Less Need, C) Unsure of Need, D) More Need, E) Most Need.
15. Does engaging with this community (virtually and/or in person) help with academics and/or your success as a student? A) Yes, B) No
16. Please comment on how engaging with this community helps or does not help with academics and/or your success as a student.
17. Does the fact that this community is located in Bird Library help with academics and/or your success as a student? A) Yes, B) No
18. Please comment on how the location of the community in Bird Library helps or does not help with academics and/or your success as a student.
19. How often have you interacted with Libraries' staff (virtually and/or in-person physically) for assignments or other activities, such as the following? Listed in column: Checking out a book, a team room, or technology; Asking for directions; Printer or technology help; Using an online resource (e-book, database, etc.); Research advice or guidance; At a Libraries' event; Have interacted with Libraries' staff; Other/Comment (please describe). Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
20. How often have you used the following Libraries' resources? Listed in column: Print books; Online resources (e-books, databases, etc.); Team rooms; Other spaces in Bird Library; Other spaces in Carnegie Library; Technology; Have used any of

- the Libraries' resources; Other/Comment (please describe). Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
21. Please indicate your level of agreement with the following statements on a scale of 1 (strongly disagree) to 5 (strongly agree). Listed in column: The Libraries' staff are welcoming and helpful; I can find the Libraries' resources I need; The Libraries' spaces are conducive to my studies and other activities; The space of the community I engage with is conducive to the activities I conduct there. In header row: 1 (worst) to 5 (best) Likert scale.
22. Which of the following best describes you? A) Freshman, B) Sophomore, C) Junior, D) Senior, E) Graduate Student, F) Alum
23. I am a: A) Full-time student B) Part-time student, C) Not Applicable
24. What is your School/College? A) School of Architecture, B) School of Education, C) College of Arts and Sciences, D) College of Engineering and Computer Sciences, E) College of Sport and Human Dynamics, F) School of Information Studies, G) College of Law, H) School of Management, I) School of Citizenship and Public Affairs, J) School of Public Communications, K) College of Visual and Performing Arts, L) Other/Not Listed
25. If you selected Other/Not Listed for your School/College, please describe.
26. If you have any thoughts on how the space of the community impacts (or impacted) the activities you conduct(ed) there (especially those related to innovation, creativity, and problem solving), or if you have any other comments, please share your opinion.
27. Would you like to enter a raffle for a prize? If you select yes, this survey will be closed and you will be directed to a new form. A) Yes, B) No

### *Employee Survey*

1. Introduction and Consent Form
2. How did you learn that the following communities would be (or were already) physically located in Bird Library? Select all that apply. Communities listed in header row: Blackstone LaunchPad powered by Techstars (Blackstone LaunchPad), Center for Learning and Student Success (CLASS), Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE). Selections listed in column: A) Syracuse University (SU) Libraries' communication (e.g., email, social media, website), B) Syracuse University communication (e.g., email, social media, website), C) Informal communication (from colleagues/friends), D) Noticed the community in Bird Library, E) Other (please describe)
3. When you first learned that the communities would be (or were already) physically located in Bird Library, how did you feel about the presence of the

communities in Bird Library? Communities listed in column: Blackstone LaunchPad, CLASS, SOURCE. Selections listed in header row: A) Extremely Negative, B) Negative, C) Neither Positive Nor Negative, D) Positive, E) Extremely Positive

4. How do you currently feel about the presence of the communities in Bird Library? Communities listed in column: Blackstone LaunchPad, CLASS, SOURCE. Selections listed in header row: A) Extremely Negative, B) Negative, C) Neither Positive nor Negative, D) Positive, E) Extremely Positive
5. What do you think the benefits are to SU Libraries and/or yourself (as an SU Libraries' employee) of having the Blackstone LaunchPad, CLASS, and/or SOURCE communities in Bird Library?
6. What do you think the drawbacks are to SU Libraries and/or yourself (as an SU Libraries' employee) of having the Blackstone LaunchPad, CLASS, and/or SOURCE communities in Bird Library?
7. How has the presence of the communities (including allocation of space) in Bird Library impacted you and your work? Communities listed in column: Blackstone LaunchPad, CLASS, SOURCE. Selections listed in header row: A) Extremely Negatively, B) Negatively, C) Neither Positively Nor Negatively, D) Positively, E) Extremely Positively
8. How do you think the presence of the communities (including allocation of space) in Bird Library has impacted SU Libraries' users and visitors? Communities listed in column: Blackstone LaunchPad, CLASS, SOURCE. Selections listed in header row: A) Extremely Negatively, B) Negatively, C) Neither Positively nor Negatively, D) Positively, E) Extremely Positively
9. How do you think these communities align with SU Libraries' mission and goals? Communities listed in column: Blackstone LaunchPad, CLASS, SOURCE. Selections listed in header row: A) Far From Aligned, B) Not Aligned, C) Unsure, D) Aligned, E) Closely Aligned
10. If you have thoughts about the Blackstone LaunchPad, CLASS, and/or SOURCE communities' alignment with SU Libraries' mission and goals, please share.
11. Do you think these communities welcome engagements/interactions with SU Libraries' employees? Communities listed in column: Blackstone LaunchPad, CLASS, SOURCE. Selections listed in header row: A) Yes, B) No, C) Unsure
12. Which community do you engage/interact with (in-person and/or virtually) the most?

**All further questions will be based on this selection.** A) Blackstone LaunchPad, B) CLASS, C) SOURCE, D) I do not engage/interact with any of the communities

13. [Displayed only if respondent had selected D in response to question 12] If you have thoughts on the factors that go into not engaging/interacting with the communities, please share.

[If question 13 was displayed, respondent was skipped to question 33.]

14. Which factors contribute to your engaging/interacting with the community you selected?
15. What percentage of your work time is spent engaging/interacting (in-person and/or virtually) with community members (including community students/faculty/employees/visitors)? A) 10% or less, B) 11% to 30%, C) 31% to 50%, D) 51% to 70%, E) 71% to 90%, F) 91% to 100%, G) Unsure
16. Before the COVID-19 related physical/social distancing restrictions were put in place, how often did you engage/interact with community members? Listed in column: In Person, Virtually, Other. Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
17. While COVID-19 related physical/social distancing restrictions were in place, how often did you engage/interact with community members? Listed in column: In Person, Virtually, Other. Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
18. If COVID-19 were not a factor, how often would you prefer to engage/interact with community members in the future? Listed in column: In Person, Virtually, Other. Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
19. What type of engagements/interactions (in-person and/or virtually) have you had with community members? Check all that apply. Listed in column: Circulation (checking out a book, a team room, or technology), Directional questions, Reference questions/research consultations, Troubleshooting the use of an online resource (e-book, database, etc.), Providing printer or technology help, Providing instruction sessions or presentations, Participating in or attending community events, Participating in meetings/projects with community members, Other (please describe). Selections listed in header row: A) Daily, B) Weekly, C) Monthly, D) Rarely, E) Never
20. Do you think the community contributes to academic success? A) Yes, B) No, C) Unsure
21. If you have thoughts on how (or whether) the community contributes or does not contribute to academic success, please share.
22. Do you think the community fosters an engaged community? A) Yes, B) No, C) Unsure

23. If you have thoughts on how (or whether) the community fosters or does not foster an engaged community, please share.
24. Do you think the community encourages participation in innovation, creativity, and/or problem solving? The following examples of innovation, creativity, and problem solving are for informational purposes only and are not intended to limit your own interpretation of the concepts: Innovation (for example, innovation and entrepreneurship experiences, improving one's product or business idea, research/innovative research, trying new approaches, etc.); Creativity (for example, creative thinking/brainstorming/writing, making/adapting creative work, producing something new/novel, etc.); Problem Solving (for example, trying a different study method to boost one's retention of course content, finding a way to improve class performance/grades, finding a way to increase learning and understanding of difficult concepts, improving communication with professor/mentor/team, revising project plan or paper to better organize and communicate ideas, etc.) Check all that apply. Listed in column: Innovation, Creativity, Problem Solving. Selections listed in header row: A) Yes, B) No, C) Unsure
25. Have any of your engagements/interactions with the community been related to community member projects/work having to do with innovation, creativity, and/or problem solving? Check all that apply. Listed in column: Innovation, Creativity, Problem Solving. Selections listed in header row: A) Yes, B) No
26. If your engagements/interactions with the community have been related to community member projects/work having to do with innovation, creativity, and/or problem solving, please share some examples.
27. Has the presence of the community in Bird Library and/or your engagements/interactions with the community impacted your own projects/work having to do with innovation, creativity, and/or problem solving? Check all that apply. Listed in column: Innovation, Creativity, Problem Solving. Selections listed in header row: A) Yes, B) No
28. If the presence of the community in Bird Library and/or your engagements/interactions with the community have impacted your own projects/work having to do with innovation, creativity, and/or problem solving, please share some examples.
29. When visiting the community in person, prior to the COVID-19 related physical/social distancing restrictions, I would rate the adequacy of the space from 1 (worst) to 5 (best) for engaging with the following: Listed in column: Innovation, Creativity, Problem Solving. In header row: 1 (worst) to 5 (best) Likert scale.

30. If you have thoughts on how the space of the community impacts your (or community member) projects/work related to innovation, creativity, and/or problem solving, please share.
31. The following changes to the community's space would improve the space and I would rate the need for improvements as follows. Listed in column: More privacy for meetings (in-person, online, and phone), More desktop computer workstations, More display monitors to connect to, More outlets, More tables and chairs for collaborative work, Less crowding in space, Different furniture configuration, Other changes (please describe, e.g., specific furnishing). Selections listed in header row: A) No Need, B) Less Need, C) Unsure of Need, D) More Need, E) Most Need
32. If you have thoughts about how certain improvements to the space would positively impact community members and/or yourself, please share.
33. If you have thoughts about how the presence of the Blackstone LaunchPad, SOURCE, and CLASS communities (including allocation of space) in Bird Library has or has not impacted you, your work, and/or SU Libraries' users and visitors, please share.
34. If you have thoughts about how SU Libraries might measure the impact (quantitatively and/or qualitatively) of the Blackstone LaunchPad, SOURCE, and CLASS, please share.
35. If SU Libraries were to consider sharing space with more units in the future, which factors should go into the decision-making process when considering bringing units into SU Libraries? (The Blackstone LaunchPad, CLASS, and SOURCE communities are just a few examples of different units.)
36. If you have any additional thoughts about any of the topics covered by this survey, please share.
37. What is your department? A) Academic Success (Access and Resource Sharing; Diversity, Equity, Inclusion, and Accessibility; Information Literacy; Learning and Academic Engagement); B) Advancement; Blackstone LaunchPad; Dean's Office; Information Systems; Strategic Marketing and Communications; C) Operational Excellence (Facilities and Security; Finance and Business Office; Human Resources and Professional Development; Program Management; University Records Management); D) Research Excellence (Acquisitions and Cataloging; Digital Library Program; Research and Scholarship; Syracuse University Press); E) Special Collections Research Center
38. Would you like to enter a raffle for a prize for the chance to win one of a few \$50 Amazon gift cards available? If you select yes, this survey will be closed and you

will be directed to a new form. (The estimated odds of winning a raffle prize of a \$50 Amazon gift card are 1 in 10.) A) Yes, B) No

## **Appendix B: Interview Guides**

### *Director Interview Guide*

#### A. Introduction and Context

#### B. Background Information on Community

1. I would like to begin by asking you to describe the primary goal or mission of your community. Or, put another way, what do you hope to accomplish?
  - a. Is your primary goal or mission the same as it was prior to mid-March 2020?
  - b. Do you expect your primary goal or mission to change in about 2 years in the future? If so, what sort of change do you anticipate?
2. Tell me about your staff.
  - a. Approximately how many people are currently on your staff?
  - b. What portion of your staff work full-time or part-time?
  - c. Approximately how many are students?
  - d. How are your staffing levels now the same or different compared to before mid-March 2020?
  - e. What do you anticipate your staffing levels will be in the future, let's say 2 years in the future?
3. Now, tell me about your participants.
  - a. About how many participants are in your community?
  - b. Who are your participants? For instance, are they typically faculty, staff, students, veterans, international students, or someone else?
  - c. What disciplines do they come from?
    - i. Are your activities restricted to these disciplines or open to people in other academic disciplines?
    - ii. Do participants self-select to participate in your community and, if not, how are they selected or recruited to participate?
  - d. How, if at all, has the number or demographics of your participants changed since mid-March 2020?
  - e. And what do you think the composition of your participants will be in about 2 years in the future, in terms of numbers and demographics?

4. Let's talk now about participation in activities in your community. What sort of activities do you support?
  - a. To what extent, if at all, do you encourage participation in
    - i. Innovative research? What examples of this work can you share with me?
    - ii. Creative thinking? What examples of this work can you share with me?
    - iii. Problem solving? What examples of this work can you share with me?
  - b. How are the activities you support now the same or different compared to before mid-March 2020?
  - c. How, if at all, do you anticipate your activities changing in the future, in about 2 years from now?
  - d. Let's talk about "academic success." What does academic success mean to you?
    - i. Would you say that your community contributes to academic success by supporting individual growth through the development of research and/or study skills? How so?
  - e. Let's talk now about the idea of an "engaged community." What does an "engaged community" mean to you?
    - i. Would you describe your community as fostering an "engaged community"? How so?
    - ii. Thinking about your current goals and mission, how important is fostering an "engaged community"?

#### C. Connection to SU Libraries and Space at SU Libraries

1. Let's talk now about the SOURCE and SU Libraries. What are the main benefits you and the SOURCE derive from being at SU Libraries?
  - a. What are the primary drawbacks or limitations?
  - b. Have the benefits or drawbacks changed since mid-March 2020?
2. How does your space at SU Libraries, including the equipment and facilities, impact your work and activities? [INTERVIEWER CAN USE INFORMATION LEARNED IN B TO PROBE ON PARTICULAR ASPECTS OF SPACE, SUCH AS SIZE AND CONFIGURATION]
  - a. [AS APPROPRIATE] What about your activities related to innovation, creative thinking, and/or problem solving?
  - b. [AS APPROPRIATE] What about your activities that contribute to academic success?

- c. [AS APPROPRIATE] And how does your space and location at SU Libraries impact your efforts to foster an “engaged community?”
  - d. How has your space at SU Libraries, and the impact of that space on your activities and goals, changed since mid-March 2020?
  - e. What, if anything, could be improved upon in your current space at SU Libraries to positively impact your work and activities?
  - f. What about particular improvements to the size and configuration, features, equipment, furniture, and so on, of your space that would have a positive impact on your work and activities?
3. Now let's talk about your community's connection to SU Libraries. If I used the word “partner” or “partnership” to describe your community's connection to SU Libraries, would that fit how you think of your community and the Libraries?
  - a. Can you describe how the term “partner” or “partnership” fits or does not fit?
  - b. Is there another term that better describes your community's connection to SU Libraries? [FOR QUESTIONS 3.c & 3.d, IF “PARTNERSHIP” DOES NOT FIT, REPLACE “PARTNERSHIP” WITH THE TERM THEY USED INSTEAD OR “CONNECTION TO.”]
  - c. As part of your community's partnership with SU Libraries, in what ways, if at all, does your community collaborate with other SU Libraries units and SU Libraries staff?
  - d. How does your community's sense of partnership with SU Libraries impact the work or activities of your community, if at all?

#### D. Ideal Space

1. Now I would like to talk about your ideal space. If you could create the ideal space for your community that would most positively impact your goals and activities, what would it be like?
  - a. So, when we talked earlier about activities related to innovation, creative thinking, and/or problem solving, as well as supporting academic success, and fostering an engaged community, how does that fit with your ideal space or does that fit with your ideal space?
  - b. How would your ideal space most positively impact:
    - i. [AS APPROPRIATE] Activities related to innovation, creative thinking, and/or problem solving?
    - ii. [AS APPROPRIATE] Contributing to academic success by supporting individual growth through the development of research and/or study skills?

- iii. [AS APPROPRIATE] Fostering an engaged community?
- c. Would your ideal space be located totally in a physical space or does your ideal include virtual spaces? What makes this the ideal location(s)?
  - i. Would your ideal physical space be located in SU Libraries or somewhere else? Why is that?
- d. Can you tell me any specifics about the size and configuration, features, equipment, furniture, etc. of your ideal space?
- e. Any other aspects of your ideal space?

#### E. Wrap Up

### *Dean Interview Guide: First Interview*

#### A. Introduction and Context

#### B. Primary Goal or Mission of Syracuse University Libraries

- 1. What is the primary goal or mission of Syracuse University Libraries?

#### C. Bringing Traditionally Non-library or Other Campus Units to SU Libraries

- 1. How do non-traditional units located at SU Libraries fit with the primary goal or mission of Syracuse University Libraries?

- 2. What have been the key considerations or factors in the decisions to allocate space to non-traditional units?

- a. Over the past few years, SU Libraries has allocated space to a number of non-traditional units. Can you describe generally the considerations or factors that brought these units to the Libraries?
  - i. [AS APPROPRIATE] For instance, did they come to reside within SU Libraries' space due to mutual agreement because of natural synergy between the units and the library? Maybe the Libraries chose to invite the units because the Libraries had space available and knew the unit needed a place? Perhaps the decision was made by the University, not SU Libraries? Maybe there were other circumstances that brought the units to the Libraries?
- b. How does the mission of a non-traditional unit factor into the decision-making about whether that unit should be allocated space in SU Libraries?
  - i. [AS APPROPRIATE] Should there be an alignment between the unit's and the Libraries' mission and goals? How so?

- c. How do you balance the space needs of non-traditional units in the Libraries and the space needs of Libraries' staff?
  - d. What is your perception of how SU Libraries staff feel about having these non-traditional units at SU Libraries?
    - i. [AS APPROPRIATE] Are you aware of staff expressing strong opinions about the presence of these units? If so, what types of opinions have been expressed?
    - ii. [AS APPROPRIATE] For instance, do you think library staff feel that these units belong in the library or are staff of the opinion that the space these units take up could be better used if given back to SU Libraries?
  - e. What role do the attitudes among Libraries' staff play in the decision-making about whether a non-traditional unit should be allocated space in SU Libraries?
  - f. Have there been occasions when a request for allocating space to a non-traditional unit has been declined and, if so, what were the key considerations for that decision?
    - i. [AS APPROPRIATE, IF THE ANSWER IS THAT A REQUEST FOR SPACE HAS NEVER BEEN DECLINED] Can you imagine what considerations might lead to the decision to decline a request for space for a non-traditional unit in the future?
3. Can you describe the considerations that go into decision-making about whether a non-traditional unit should become part of the Libraries' organizational structure? In other words, what goes into deciding whether a unit should not only be provided space at SU Libraries but formally become part of the Libraries?
  4. What about the future? How do you envision the sharing of space with non-traditional units in the near future, let's say two years from now, as well as further in the future? What will that be like?
  5. Do you have any thoughts you would like to share about how SU Libraries' space is used and may be used in the future or how a temporary lack of space (due to COVID-19 related changes) has affected your thinking about library space and sharing space with non-traditional units?

#### D. Wrap Up

### *Dean Interview Guide: Second Interview*

#### A. Introduction and Context

## B. The Blackstone LaunchPad, the SOURCE, and CLASS at SU Libraries

1. Since our research is focused on the Blackstone LaunchPad, the SOURCE, and CLASS, can you describe the circumstances and considerations that went into the decision to allocate space to these units? If there were different circumstances and considerations for each unit, please do elaborate on those distinctions.
2. In our previous interview, we talked about the Libraries' mission. Can you describe how and where these units (SOURCE, LaunchPad, and CLASS) fit in the Libraries' mission, or do they fit? If the answer is different for each unit, let's discuss the Libraries' mission as it relates to each individual unit.
3. Let's talk now about the main benefits the Libraries derive from having these units (CLASS, LaunchPad, SOURCE) at the Libraries and the main benefits you think the units derive from being at SU Libraries. If this varies by unit, please do talk about the distinctions for each individual unit.
  - a. What are the main benefits the Libraries derive from having these units (CLASS, LaunchPad, and SOURCE) at the Libraries?
  - b. What are the primary drawbacks or limitations for the Libraries of having these units (CLASS, LaunchPad, and SOURCE) at the Libraries?
  - c. What main benefits do you think these units (CLASS, LaunchPad, SOURCE) derive from being at SU Libraries?
  - d. What do you think the primary drawbacks or limitations of being at the Libraries are for these units (CLASS, LaunchPad, and SOURCE)?
  - e. How would you describe the changes since mid-March 2020 in benefits or drawbacks to SU Libraries or to the units (LaunchPad, SOURCE, and CLASS) as far as being located at SU Libraries?
4. Now let's talk more about the units (LaunchPad, SOURCE, and CLASS) and their connection to SU Libraries. If I used the word "partner" or "partnership" to describe the units' connection to SU Libraries, would that fit how you think of these units and the Libraries?
  - a. Can you describe how the term "partner" or "partnership" fits or does not fit? Does it fit one unit more than another?
  - b. Is there another term that better describes the connection of these units to SU Libraries? [FOR QUESTIONS 3.c & 3.d, IF "PARTNERSHIP" DOES NOT FIT, REPLACE "PARTNERSHIP" WITH THE TERM THEY USED INSTEAD OR "CONNECTION TO"]
  - c. As part of the units' partnership with SU Libraries, in what ways, if at all, do you think these units collaborate with other SU Libraries units and

SU Libraries staff? If the answer to this question varies by unit, please elaborate on those distinctions.

- i. Of Libraries staff, what % do you think is directly involved with these units (CLASS, LaunchPad, and SOURCE)?
- ii. What do you think contributes to collaboration between units (LaunchPad, SOURCE, and CLASS) and other SU Libraries' staff and SU Libraries units?
- iii. [AS APPROPRIATE] Is it significant overlap in goals and services or physical proximity to service points (such as reference/help desk) or library staff office space, or some other factors?
- d. How do you think this sense of partnership or collaboration with SU Libraries impacts the work or activities of these units (LaunchPad, SOURCE, and CLASS) and of the Libraries, if at all? If this varies by unit, please describe.
- e. Has the level of collaboration or sense of partnership changed since mid-March 2020? How so?
- f. How do you anticipate this might change in the future, in about two years from now?
- g. What do you think makes a partnership between SU Libraries and the units residing in the Libraries (such as LaunchPad, SOURCE, and CLASS) successful?
  - i. How would you measure this?

C. Participants, Participation, Activities, and Impact of the LaunchPad, the SOURCE, and CLASS at SU Libraries

1. Let's talk now about the participants, participation, and the activities of the LaunchPad, SOURCE, and CLASS at SU Libraries. What is your sense of the numbers and demographics of students and other participants such as faculty in these units? If this varies by unit, please elaborate on the distinctions between units.
  - a. Are there disciplines/programs/areas across campus that you feel are more represented than others?
2. Let's talk now about the general concept of "academic success." What does academic success mean to you?
  - a. How do you think these units (LaunchPad, Source, CLASS) contribute to academic success? If this varies by unit, please elaborate on the distinctions between units.
    - ii. Would you say that these units (LaunchPad, Source, CLASS) contribute to academic success by supporting individual growth

through the development of research and/or study skills? How so?  
If this varies by unit, please elaborate.

3. Let's talk now about the idea of an "engaged community." What does an "engaged community" mean to you?
  - a. Would you describe each of these units (SOURCE, LaunchPad, CLASS) as fostering an "engaged community"? How so? If this varies by unit, please elaborate on the distinctions.
4. Do you think the units LaunchPad, SOURCE, CLASS encourage participation in innovative research, creative thinking, or problem solving? How so? Do you have any examples to share? If this varies by unit, please elaborate.
5. What impact, if any, do you think the presence of these units (CLASS, LaunchPad, SOURCE) has on the Libraries' innovative research, creative thinking, or problem solving? So, on Libraries' staff working at the library and on students and faculty visiting the library, who are not participants in these units? Any examples to share? If this varies by unit, please elaborate.
6. Have you noticed a change in participants (as far as numbers and demographics), participation, and the activities of the LaunchPad, SOURCE, or CLASS at SU Libraries since mid-March 2020? How so?
7. How, if at all, do you think the participants (as far as numbers and demographics), participation, and the activities of the LaunchPad, SOURCE, or CLASS at SU Libraries might change in the future, in about two years from now?
8. How would you, from the Libraries' standpoint, measure the participants (as far as numbers and demographics), participation, and the activities of the LaunchPad, SOURCE, or CLASS?
  - a. What about measuring the participation in activities related to innovative research, creative thinking, or problem solving?
  - b. What about measuring "academic success" and "engaged community?"
9. Let's talk more about the impact of these units (the LaunchPad, SOURCE, and CLASS).
  - a. What do you think the impact of these units (LaunchPad, SOURCE, and CLASS) has been on participants in those units?
  - b. What about the impact on students, staff, and faculty visiting SU Libraries?
  - c. What has been the impact of these units on other Libraries' units and on Libraries' staff?
  - d. What about the impact of space allocation for these units on other Libraries' spaces?

- e. How might you measure the impact of these units and demonstrate that impact in something like the annual ARL survey?
  - i. What would be your top five metrics for measuring the impact of these units?
  - ii. [AS APPROPRIATE] Would your top five metrics include, for example, tangible expressions of good towards the Libraries (such as mentions of Syracuse University Libraries and the impact of being in the Libraries in University reports); additional funding streams to support building infrastructure improvements and furniture; identifiable or quantifiable student engagement with Libraries' resources; or some other metrics?

#### D. Current Space and Ideal Space for the LaunchPad, the SOURCE, and CLASS

1. Do you think the space provided to these units (the LaunchPad, SOURCE, and CLASS), including the equipment and facilities, meets the units' needs? If not, what could be improved? If this varies by unit, please elaborate.
2. How do you balance the space needs of CLASS, LaunchPad, and the SOURCE and the space needs of other Libraries' units and Libraries' staff?
  - a. Would there be any point at which you would decline to provide additional space to the LaunchPad, CLASS, and the SOURCE? If so, what considerations would go into that decision?
3. Now I would like to talk about your ideal space. If you could create the ideal space for these units (CLASS, LaunchPad, SOURCE) that would most positively impact their goals and activities, what would it be like? This might vary by unit and, if so, please do elaborate.
  - a. How do you think this ideal space would most positively impact the units' activities related to innovation, creative thinking, and/or problem solving?
  - b. What about the activities contributing to academic success by supporting individual growth through the development of research and/or study skills?
  - c. What about activities related to fostering an engaged community?
  - d. Would your ideal space for these units be located totally in a physical space or does your ideal include virtual spaces? What makes this the ideal location(s)?
  - e. Would your ideal physical space for these units be located in SU Libraries or somewhere else? Why is that?
4. Is this more perfect, ideal space for the units mutually beneficial? That is, does this ideal space benefit the units as well as the Libraries? How so?

## E. Wrap Up

### Appendix C: Analysis Methods for Interviews

#### *Analysis Method for Director Interviews*

Two team members jointly conducted semi-structured interviews with each of the three community directors in spring 2021, using an interview guide developed with guidance from ARL social scientist consultant Margaret Roller. Each interview was 60 minutes long, took place via Zoom, and was recorded. Analysis took place in fall 2021 and was a collaborative effort between one of the interviewers and another team member who had not been present at the interviews. After consulting with Roller, a form of interpretative phenomenological analysis was implemented. In this type of analysis, the focus is on participants' lived experiences and meaning-making in a particular context. The aim of the analysis is to conceptualize intended meanings and derive overarching themes.

The eight steps in that process\* for analyzing interview data are:

1. **Record** each interview based on the research objectives
2. **Review** the data within and across interviews
3. Develop unique **labels or codes**
4. **Code**
5. Identify **categories**
6. Identify **themes or patterns**
7. Draw **interpretations** and implications from the data
8. **Verification**

\* Assumes the unit of analysis is the entire interview

More information about this analysis process may be found on Margaret Roller's *Research Design Review* blog and in her book *Applied Qualitative Research Design*.<sup>23</sup>

Following this method, each team member participating in the analysis completed steps one and two independently. Additionally, one team member edited for accuracy the automatically created transcript of each interview before making the transcripts available to the entire research team. Given limited time and the very small number of interviews we were working with (just three, in contrast to dozens and even hundreds that can be analyzed using this method), we followed Roller's advice to condense steps three through five. It also helped us conceptually to think about and refer to "coding" as "labeling."

Each analyst first derived rough initial categories and then recurrent themes or patterns in those categories. Comparing results, there was widespread agreement about major themes. At this point, we moved to step seven and drew interpretations and implications from the data.

The final verification step consisted of sharing that analysis with the other two team members who had not participated in it, but had either been present at the interviews or had listened to the interview recordings and/or read the interview transcripts. The entire team discussed whether the analysis made sense and seemed credible, based on each person's understanding of the interview content.

### *Analysis Method for Dean Interviews*

Two team members jointly conducted semi-structured interviews with dean of the libraries in spring 2021, using an interview guide developed with guidance from ARL social scientist consultant Margaret Roller. The first interview was 60 minutes long and the second interview was 90 minutes long. The interviews took place via Zoom and were recorded.

Analysis took place during fall 2021 and spring 2022, with the goal of gaining insight into the dean's perspective on the communities and their impact, as well as contextualizing the themes identified in the director interviews. Analysis was a collaborative process involving all members of the team. Each team member listened to the interviews (and/or had conducted the interviews) and read the transcripts. The transcripts, which had been automatically machine generated, were edited for accuracy by one of the team members prior to sharing with the rest of the team. Team members had multiple discussions about what we had each learned from the interviews. In the spring, one team member closely reviewed the interview transcripts while incorporating what had been learned into the "Findings" section of this report. This write-up of the analysis was then reviewed and agreed upon by the team.

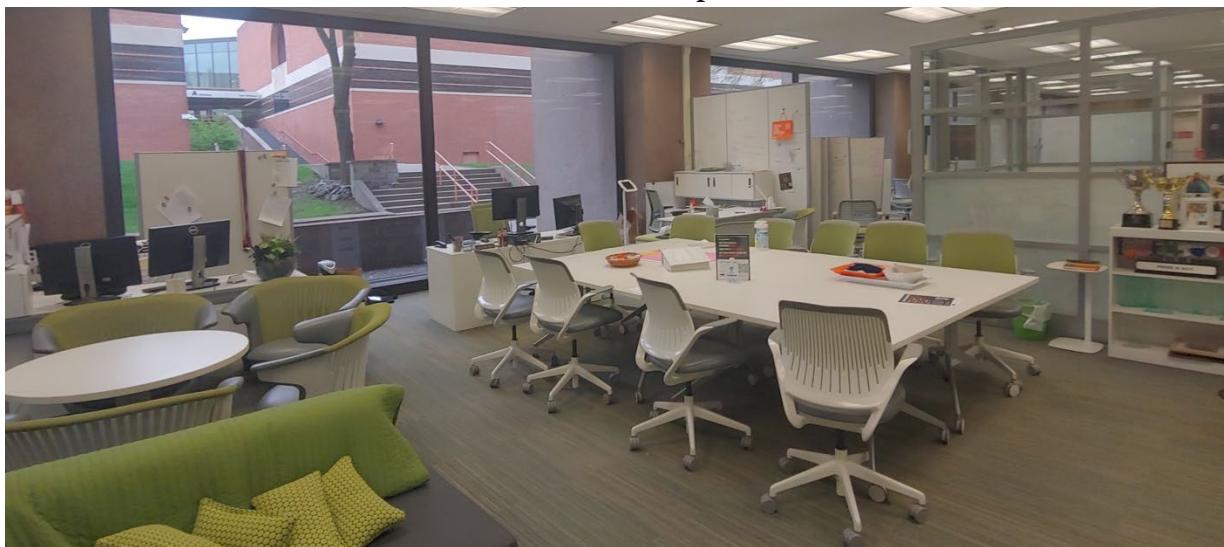
## Appendix D: Photos of Community Spaces

### *Blackstone LaunchPad Photos*

Exterior Photo of Blackstone LaunchPad:



Interior Photo of Blackstone LaunchPad Main Space:



Interior Photo of Blackstone LaunchPad Private Meeting/Work Room:



Interior Photo of Blackstone LaunchPad Classroom/Workshop Space:



### *CLASS Photos*

Exterior Photo of CLASS Study/Classroom Space:

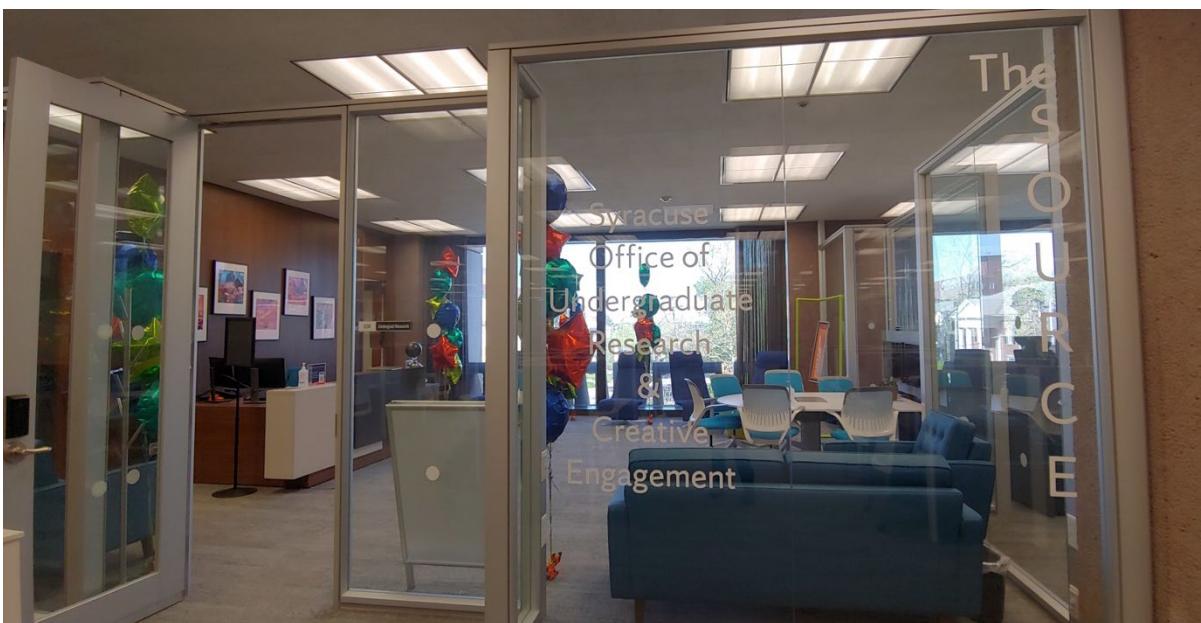


Interior Photo of CLASS Study/Classroom Space:



### *SOURCE Photos*

Exterior Photo of SOURCE:



Interior Photo of SOURCE Main Space:



Interior Photo of SOURCE Reception Desk Between Office and Conference Room Doors:



## Appendix E: Comparison of Communities' Space Percentages

Space Questions	CLASS	LaunchPad	SOURCE
Initial square feet footprint in Bird Library	625	625	1131
Current square feet footprint in Bird Library	4375	1490	1131
Square feet footprint growth	3750	865	0
Percentage increase in square feet footprint	86%	58%	0%
Percentage of Bird Library's 215,567 square feet of total space	2.03%	0.69%	0.52%
Percentage of Bird Library's 97,128 square feet of public space	4.5%	1.53%	1.16%
Percentage of public space based on floor where community resides	36%	6%	5.50%
Weekday (Monday through Friday) hours the community is open to community participants	8:00 a.m. to 9:30 p.m.	24 hours	8:00 a.m. to 5:00 p.m.

## **Appendix F: Comparison of Communities' Usage of Library Resources**

Usage of the Libraries by members of the communities totaled 25% of undergraduate users and 27% of their uses. Individuals can be affiliated with more than one community.

Fiscal year 2019 Usage by	Overall (includes Communities)	Launchpad	CLASS	SOURCE
Undergrads	13,379; 91%	909; 96%	2,361; 93%	131; 98%

Of those undergraduates who used the Libraries in fiscal year 2019:

Resources Used	Sum of Overall %	Sum of Launchpad %	Sum of Class %	Sum of Source%
Workstations	40%	35%	40%	32%
Remote access to online resources via EZproxy	28%	27%	15%	27%
Building after 8 p.m.	13%	14%	19%	12%
Technology Circulation	9%	11%	14%	12%
Print Circulation	4%	4%	3%	8%
Room Requests	3%	4%	5%	4%

<b>Resources Used</b>	<b>Sum of Overall %</b>	<b>Sum of Launchpad %</b>	<b>Sum of Class %</b>	<b>Sum of Source%</b>
Media Circulation	2%	3%	3%	2%
Course Reserves	0%	0%	0%	1%
Interlibrary Loans	0%	0%	0%	1%
<b>Grand Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Notes

<sup>1</sup> “About the Blackstone LaunchPad at Syracuse University Libraries,” Syracuse University Blackstone LaunchPad, accessed August 27, 2021, <https://launchpad.syr.edu/about/>.

<sup>2</sup> “About the SOURCE,” Syracuse University Office of Research, accessed April 5, 2022, <https://research.syr.edu/source/about-the-source>.

<sup>3</sup> “Center for Learning and Student Success,” Syracuse University Center for Learning and Student Success, accessed April 5, 2022, <https://class.syr.edu>.

<sup>4</sup> Rick Anderson, “The Battle over Library Spaces. Part 2: Being a Host with the Most,” *Library Journal* 139, no. 8 (May 1, 2014), <https://www.libraryjournal.com/story/the-battle-over-library-spaces-part-2-being-a-host-with-the-most>.

<sup>5</sup> Charlene Hurt, “Building Libraries in the Virtual Age,” *College & Research Libraries News* 58, no. 2 (February 1997): 75–91, <https://doi.org/10.5860/crln.58.2.75>.

<sup>6</sup> Craig Gibson and Dorothy C. Lockaby, “The Johnson Center Library at George Mason University,” *Reference Services Review* 35, no. 2 (May 15, 2007): 322–30, <https://doi.org/10.1108/00907320710749227>.

<sup>7</sup> Scott Carlson, “Is It a Library? A Student Center? The Athenaeum Opens at Goucher College,” *Chronicle of Higher Education*, September 14, 2009, <https://www.chronicle.com/article/is-it-a-library-a-student-center-the-athenaeum-opens-at-goucher-college/>.

<sup>8</sup> David Attis et al., *Redefining the Academic Library: Managing the Migration to Digital Information Services* (Washington, DC: University Leadership Council, The Advisory Board Company, 2011), xi, <https://utlibrarians.files.wordpress.com/2012/01/23634-eab-redefining-the-academic-library1.pdf>.

<sup>9</sup> Attis et al., *Redefining the Academic Library*; David Attis et al., “Redefining the Academic Library,” Slideshow, University Leadership Council, The Advisory Board Company, December 2, 2011, <https://www.slideshare.net/libraryviews/redefining-the-academic-library>.

<sup>10</sup> Attis et al., *Redefining the Academic Library*, 13.

<sup>11</sup> Attis et al., *Redefining the Academic Library*, 63.

<sup>12</sup> Rick Anderson, “The Battle over Library Spaces. Part 1: Saying Yes and Saying No,” *Library Journal* 139, no. 8 (May 1, 2014), <https://www.libraryjournal.com/story/the-battle-over-library-spaces-part-1-saying-yes-and-saying-no-peer-to-peer-review>.

<sup>13</sup> Anderson, “The Battle over Library Spaces. Part 2.”

<sup>14</sup> Barbara Fister, “Repositioning Library Space,” in *New Roles for the Road Ahead: Essays Commissioned for ACRL’s 75th Anniversary*, ed. Nancy Allen (Chicago: Association of College and Research Libraries, 2015) 43–45, [http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/new\\_roles\\_75th.pdf](http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/new_roles_75th.pdf).

<sup>15</sup> Sarah Pedersen, *Learning Communities and the Academic Library* (Olympia, WA: Washington Center for Improving the Quality of Undergraduate Education, 2003), 3, <http://wacenter.evergreen.edu/node/1749>.

<sup>16</sup> Fatt Cheong Choy and Su Nee Goh, “A Framework for Planning Academic Library Spaces,” *Library Management* 37, no. 1/2 (January 11, 2016): 26–27, <https://doi.org/10.1108/LM-01-2016-0001>.

<sup>17</sup> Ron Foster and Werner Sbaschnik, “State University of New York Library Space Survey,” University Faculty Senate Operations Committee, March 2010,

<https://system.suny.edu/media/suny/content-assets/documents/faculty-senate/LibrarySpaceSurvey.pdf>.

<sup>18</sup> “About the Blackstone LaunchPad.”

<sup>19</sup> “Center for Learning and Student Success.”

<sup>20</sup> “About the SOURCE.”

<sup>21</sup> Joyce Chapman et al., *Understanding the Experiences and Needs of Black Students at Duke*, Duke University Libraries, April 2020, <https://hdl.handle.net/10161/20753>.

<sup>22</sup> Laura Spears and Valrie Minson, *Library Impact Research Report: Facilitating Innovative Research, Creative Thinking and Problem-Solving* (Washington, DC: Association of Research Libraries, forthcoming).

<sup>23</sup> Margaret R. Roller, *Research Design Review* (blog), Accessed April 29, 2022, <https://researchdesignreview.com>; Margaret R. Roller and Paul J. Lavrakas, *Applied Qualitative Research Design: A Total Quality Framework Approach*, (New York: The Guilford Press, 2015).