What Do You Get When You Mix Libraries and Entrepreneurship? The Case of an Innovation Hub at a Large Research Library

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Abstract

This article presents a case study of the University of Minnesota (UMN) Libraries collaboration with the UMN Carlson School of Management's (CSOM) Holmes Center for Entrepreneurship (HCE) to create an innovation hub in our most heavily trafficked undergraduate library. During the same time that academic libraries have added makerspaces and have routinely invited partners into their buildings, entrepreneurship support has become a strategic priority for universities, business schools, and business libraries. The story of our innovation hub represents a confluence of these trends, and illustrates some of the challenges and benefits brought on by inviting a new kind of partner into the library space.

Introduction

This article presents a case study of the University of Minnesota (UMN) Libraries collaboration with the Carlson School of Management's (CSOM) Holmes Center for Entrepreneurship (HCE) to create an innovation hub in our most heavily trafficked undergraduate library. This innovation hub is intended to provide a dedicated and flexible space for students to work collaboratively on projects related to innovation and entrepreneurship. During the same time that academic libraries have added makerspaces and have routinely invited partners into their buildings, entrepreneurship support has become a strategic priority for universities, business schools, and business libraries. The story of our innovation hub represents a confluence of these trends, and illustrates some of the challenges and benefits brought on by inviting a new kind of partner into the library space.

While collaboratively managed spaces in libraries have grown more common in recent years, usually these are partnerships between the library and other academic support units like writing and tutoring centers, information technology, or career services. While this information or learning commons model has provided a basis for many campus collaborations, Lippincott (2004) points out that often space "partnerships" are more about co-located services rather than true partnerships. True partnerships require shared goals, planning, and often costs (148). The Toaster Innovation Hub is a true partnership in every sense. From construction to operations, the UMN Libraries and HCE have worked together towards shared goals, sometimes through difficult negotiations and cultural differences. This article focuses on the nascent development of this partnership, how we navigated challenges and opportunities along the way, and how it met our respective and shared strategic goals. The space was only briefly open to the public for three weeks before closing due to the COVID-19 pandemic, so this case study is a preliminary reflection on the establishment of our partnership and all that involved. We plan in the future to report back with assessments on how, once reopened in a new post-pandemic environment, the space is working and whether or not our goals are being met.

Literature Review

Partnerships in libraries

As the needs of our students and the priorities of our institutions have changed over time, libraries have been quick to repurpose spaces, change services, and offer new technology. This often has included partnering with other campus units with common goals such as writing centers (Gardner, Napier, and Carpenter 2013), campus IT (Allen, et al. 2010, 165) or even academic departments in order to provide services and resources such as peer tutoring (Besara and Kinsley 2010), GIS technology, or a data commons. (Allen, et al. 2010, 166).

Outside of partnerships tied to a shared physical space, programmatic partnerships between academic libraries and a variety of campus offices or departments are almost ubiquitous. Librarians have long partnered with faculty in teaching information literacy skills (Salony 2009, 36) and now often collaborate with student affairs departments on everything from orientation to finals programming, diversity initiatives to career development (Hinchliffe and Wong 2012). We even develop joint programming for faculty together with teaching and learning centers (Handler and Hays, 2019) and with grant administration offices around researcher data sharing compliance (Broadbent, el al. 2018).

Innovation/Entrepreneurship Programmatic Partnerships

Specifically, in support of entrepreneurship and innovation on campus, many programmatic partnerships involving libraries have been described in the literature. For example, University of Toronto libraries collaborated with the MaRS Discovery District, an innovation hub and launchpad for startups, to develop a market intelligence service staffed on site by librarians (Fitzgerald, Anderson, and Kula 2010). Similarly, the University of Arizona (UA) libraries partnered with Tech Launch Arizona to form a new Business Intelligence Unit on campus. This unit consisted of cross-disciplinary teams to support the commercialization process (Elliot, et al. 2017). At Purdue, librarians support the Purdue Foundry, an organization that works with startups and entrepreneurs in the commercialization process, through a train-the-trainer model where they teach Foundry staff how to use library databases to do market and business research. (Stonebreaker, et al. 2017, 10-14).

Innovation/Entrepreneurship in Libraries

In addition to programmatic partnerships related to innovation and entrepreneurship, there are many examples of how libraries have changed their services, library staffing models, (Pothier, 2019) librarian expertise (Crumpton and Bird, 2019), and spaces (Bieraugel, 2019) to meet these needs. Many academic libraries have also added makerspaces, a potentially important tool for prototyping or other innovative developments. In a survey of Association of Research Libraries (ARL) member institutions, 26 of 36 survey respondents had makerspaces in their libraries (Michalak and Rysavy 2019, 71). While many articles have been written about these new makerspaces in academic libraries, there are few that speak to their roles in entrepreneurship or work as a part in a larger entrepreneurship ecosystem.

Partnerships for Innovation/Entrepreneurship Spaces in Libraries

Outside of makerspaces, there is little published about dedicated spaces for innovation and entrepreneurship in libraries and even less about those who work with campus partners to transform these spaces. However, there are a few examples to mention. At the California State University, San Bernardino's Palm Desert Campus, the library collaborated with the Coachella Valley Economic Development Partnership, the Small Business Development Center, and the Women's Business Center to create a co-working space for the general community to use in an underutilized library space. The space included programming on using library databases for business planning (Lumley 2014, 57).

Another example is at University of Arizona's UA iSpace. Nichols, Melo, and Dewland (2017) describe this space as one that brings together three types of spaces: makerspaces, digital humanities centers, and co-working spaces in support of "entrepreneurship, emerging technology, and digital humanities for the campus at large" (363-364). This project was a partnership between the libraries and two different campus constituents, InnovateUA, an entrepreneurship student organization, and faculty in the College of the Humanities. The groups were looking for library space to "support entrepreneurial efforts among students and digital humanities or maker activities among both students and faculty" (366). In this space, InnovateUA and the Libraries work together to offer entrepreneurship and technology related workshops and other events (368). Additionally, faculty and researchers from the College of Humanities have utilized iSpace support for high profile projects that gave the space exposure as well as new equipment through faculty donations and grant money.

Much more has been written about public libraries and their business or entrepreneurship spaces and partnerships, likely due to the commonality and long history of this arrangement. As far back as 1930, Manley and Winser identified 20 large city public libraries with "business branches or definite business departments" (as cited in Macdonald 2015, 345). A 2015 study (Macdonald) surveyed public libraries and found that 55% of question respondents (n = 38) indicated that their business center had a dedicated space (349) as defined as "a physical space on-site or off-site, an entire floor, a section of a floor, a suite, room or separate building that is dedicated to business services and supervised by a professional librarian" (345). Eighty percent (n = 47) of question respondents reported having a partnership with a community business agency such as the Small Business Development Agency, SCORE, the Chamber of Commerce or a tech incubator (352).

While little has been published about these kinds of spaces and partnerships in academic libraries, we can glean a bit of information from other sources. We know from professional networking and conferences that the Kent State University library is home to LaunchNet, which is their campus entrepreneurial program. Indeed, not only is LaunchNet housed in the library, but the program director reports up through the Libraries administration (Burhanna et. al. 2020). We also know from looking at websites that additional innovation and entrepreneurship spaces do exist in libraries. Unfortunately, these websites generally tell us little about any partnerships or collaborations, or the library's involvement outside of space sharing.

Are these entrepreneurship spaces located in libraries like the co-located model that Lippincott (2004) described? Or are they run by the library without a partner? Or were they developed collaboratively with a partner like our Toaster Innovation Hub at the University of Minnesota? It's hard to discern. For instance, the University of Rochester Libraries' website states it is home to the Barbara J. Burger iZone, a "creative problem-solving space, program and community designed to empower students to explore and imagine ideas for social, cultural, community, and economic impact" (iZone at University of Rochester 2019). The space's "visionaries" are listed as the financial donor Barbara J. Burger and the Dean of libraries, Mary Ann Mavrinac. This appears to indicate that this space is run by the libraries, but it is unclear if there are any other institutional partners.

Background

UMN Libraries' Spaces

The UMN Libraries has a goal of modernizing our spaces to meet the needs of today's students and researchers (University Libraries 2016), but we also face (like most of our peers) limited funding and logistical challenges that slow our progress toward this goal. We recognize that users require more collaborative work spaces than in the past, as well as use of a wide range of technology resources, while the need for immediate access to print collections is decreasing in importance. However, especially as the only research institution in our state, we must steward our print collection responsibly and with the future in mind. Despite limited resources to facilitate the relocation or responsible withdrawal of print items, we have been able to slowly add modern, collaborative, technology-rich spaces in recent years. We have a long-term plan to continue along this path.

UMN Libraries and Innovation

Beyond the question of space, the UMN Libraries has recently been intentionally developing and promoting our support for innovation and commercialization of research. We have created makerspaces in two of our library buildings and also built out user-friendly media studios in all of our major libraries. Our makerspaces are designed to be accessible to all students, regardless of skill level or affiliation with particular departments on campus. We focus on entry-level maker tools and intentionally invite the participation of women and students from marginalized backgrounds through programming and marketing. In terms of research support, the business and health sciences librarians have supported research commercialization efforts around campus, including efforts beyond the business school. They have been brought in to contribute instruction and provide consultations to faculty and students participating in entrepreneurship workshops, NIH grants focused on commercializing medical research, and foresight leadership institutes, among others. We have also added databases to our collections focused on venture funding and emerging technologies, while aggressively negotiating expansive access rights to these whenever possible.

Innovation at UMN

The UMN innovation landscape is likely similar to our peer institutions in terms of overarching goals and how the work is accomplished on campus. UMN prides itself on technology transfer and is frequently listed as one of the top public universities in this area (Office of Technology Commercialization 2019). The current strategic focus on solving societal "Grand Challenges" is about connecting University research with tangible outcomes for external communities (University of Minnesota 2014). Work around innovation and entrepreneurship is accomplished largely through decentralized activity, with a handful of campus-wide initiatives. There are makerspaces operated by specific colleges and often only accessible to affiliates of those schools. Faculty and staff develop innovative, entrepreneurial curriculum and research initiatives across the university, but mostly focused within their own specific academic units.

There are also several centralized, university-wide units that support the entire campus community but are targeted toward graduate students and faculty. The Office of Technology Commercialization (OTC) helps researchers from across the university license their technology and potentially start businesses by offering resources and education and by linking them to the external business community. The Earl E. Bakken Medical Device Center bridges the science, engineering, and health sciences colleges at UMN around medical device creation. The Holmes Center for Entrepreneurship (HCE), the Libraries' partner in the Toaster, is housed at the Carlson School of Management but its mission is university-wide. HCE reaches a wide range of campus stakeholders but lacks a dedicated public space. They offer a variety of courses, mentorship programs, venture competitions, speakers, and more for students, staff, faculty, and community members interested in entrepreneurship.

Beginning of the Libraries & HCE Partnership

In spring of 2018, HCE approached senior administration in the Libraries about the possibility of creating a dedicated space for student innovation in Walter Library. While this could be considered the unofficial start of our current collaboration, there were explorations and discussions that preceded this conversation. HCE had spent several years investigating options on campus to create a large, cross-disciplinary, dedicated space for undergraduate students centered around innovation and entrepreneurship. In 2018, HCE engaged a group of Carlson School of Management MBA students as part of an experiential learning course to study this issue more deeply and make a set of recommendations for some sort of student-focused innovation center on the UMN campus. The MBA students conducted an exhaustive environmental scan, including surveys of current students, interviews with stakeholders on campus, and review of university innovation centers around the country (Churchward et al. 2018). The students cited the dispersed nature of innovation support on campus as a major challenge. Students from different disciplines encounter barriers when they are trying to work together on innovative projects. This is problematic at its core because innovation support is inherently collaborative and almost always draws from more than one discipline. The MBA team also met with librarians involved in innovation initiatives, learning about the libraries' commitment to innovation support and also the inimitable value of library space on campus in terms of accessibility, inclusion, and popularity among undergraduates.

The MBA students ultimately identified the Libraries as an essential partner for UMN and HCE innovation efforts, due to the Libraries' inherent cross-disciplinarity and trusted role among students. They recommended an initial core partnership between the Libraries and HCE to develop and operate a small-scale innovation space within one of the library buildings. They also advised the Libraries and HCE to seek other partners to join in the venture and build momentum and interest across the University toward a long-term goal of a new innovation building on central campus.

Establishing a Partnership

Once we had been approached, Libraries' leadership needed to evaluate whether or not to agree to join this project. On the surface, the invitation was enticing. An important part of HCE's approach to the Libraries was their willingness to potentially fund the cost of making a space usable. We are eager to remodel library spaces but struggle to find resources to do so, and this approach might help us meet that goal more quickly. We were not opposed to designating the space for innovation-related collaborative work, because we recognized that need for our students and the initial proposal was broad enough to meet our interests in inclusivity.

In return for cost sharing, HCE wanted a prime space in the busiest library in our system, Walter Library, which is located in the heart of the Twin Cities campus. Even though this library is the designated physical science and engineering library and houses those collections, it is also the de facto main library for undergraduates to visit and study in. Walter Library's popularity is due to its central location right on the main campus mall, in addition to its classic beaux arts architectural design that appeals to students and visitors alike. HCE was specifically interested in Walter Library's heavily trafficked main library floor which features large and open reference rooms, a learning commons with tutoring services, browsable media collections, ample individual study space, and the current makerspace.

Libraries' Goals and Concerns

Libraries' administration was thus initially open to considering HCE's proposal but we also had concerns and goals of our own. In terms of priorities for remodeling, we had other spaces more in need of an update in Walter Library than the main reference rooms. We already were achieving the uses we wanted out of the main library common rooms and were reluctant to interrupt that use with a new designated purpose. We did not want to find ourselves giving up desirable student work space. On the other hand, other floors of Walter Library are filled with stacks of largely unused periodicals, and our long-range wish list already included plans to relocate collections to storage and create modern student work space. We decided we would only consider this kind of unusual proposal if we could gain, rather than lose, active user space. Another question was how we would manage the existing periodicals, if HCE was willing to consider a different space in Walter. Our current storage facilities are full. It costs money that we do not have to relocate the materials. HCE told us they wanted a turnkey project that could move quickly and at low cost. They wanted to be in place with this new innovation space within the year. This timeline seemed next to impossible to us, but we did not reject the possibility outright.

However, the biggest and most important question of all was whether or not we could imagine a mutually beneficial partnership over the long term with HCE. We were not interested in simply turning over valuable library space or for the Libraries to be a partner in name only. We did not want our sole contribution to be space and operations. Instead, we believe we have expertise in supporting and developing innovation and entrepreneurship, and wanted our unique value and role to be acknowledged in any partnership moving forward. Ideally, this partnership would cement our valuable contribution supporting innovation and entrepreneurship to the entire university. Perhaps this partnership could facilitate our inclusion in high-level strategic initiatives around these institutional goals, so we did not get left behind or brought in at late stages after the key decisions have been made.

We gathered information internally about what was possible. Library administration agreed on a different but also valuable space in the Libraries to bring forward to HCE as an alternate possibility. This space comprised 6,500 square feet in the Walter Library basement next to a popular coffee shop. Perhaps counterintuitive to some, the basement level is a common entry point on our campus because most buildings are connected through basement level tunnels which are heavily used during cold weather (which is much of the school year in Minnesota). This alternative space housed about 130,000 volumes of science periodicals, two private group study rooms, and a small assortment of furniture for studying. Our collections management staff agreed to quickly come up with a preliminary plan for how to relocate those periodicals and identify the cost that would likely be involved. We were advised cost estimates could range widely, since we might have to pay for storage space if we could not find room in our existing storage caverns. We thought that once the collections were removed, the space could be transformed with a fairly simple remodel—new paint, carpet, and electrical upgrades.

With such substantively distinct contributions to this partnership, Libraries' leadership were also wary from the outset of potential power imbalances between HCE and ourselves. Without HCE's cash contributions, we would not be able to accomplish the same goals for this space with such a tight timeline. We would likely not even be able to pursue a remodel for many years. Yet, without our in-kind contributions of space and staff time, HCE would have to fund a different space and find another partner. We recognized that we made for a particularly suitable partner and HCE might have trouble finding anything comparable to our space and staff. After all, the Libraries brought breadth and depth of staff expertise to space and infrastructure projects that our partner lacked. This became clearer over time (and more on that below). However, despite how valuable we knew our in-kind contributions were, we ultimately decided to find additional direct money from our budget to add to this project. We felt this would demonstrate our commitment and be something we could point to over time. The ability to draw on "our own" money and also remind our partners of this contribution has turned out to be valuable at various moments of tension or conflict.

Negotiations and Early Planning

We negotiated with HCE through much of the summer and fall of 2018, ultimately reaching a signed memorandum of agreement (MOA) in November 2018—about six months from our first conversations. We began to move forward with the project while still negotiating,

as an act of good faith and also for our own timing reasons. We had a separate major collections move ahead of us in the next year and if we did not act quickly, we would lose available staff resources to make this specific move possible. Staff also proposed the Walter Library move could serve as a pilot for post-print cancellation access analytics relevant to all future periodicals moves.

Shared Goals

Together, we agreed in theory on the goals of the space, which made many decisions and working together quite easy and enjoyable. Some points of initial disagreement in the negotiations were easily resolved. HCE agreed fairly early on to the Walter Basement as an agreeable location, even though it was not their first choice. We all wanted the space to be student-centered, collaborative, and designated for innovation-focused activities.

Access to the Space

The issues that were harder to agree on included access questions and how to handle future operations. HCE was puzzled by the Libraries' insistence that even if the space were designated for innovation, libraries' staff would never make someone leave the space if they were not visibly engaging in that kind of activity. We argued that asking users to leave our spaces for these reasons (1) was impossible to enforce because we cannot accurately tell what users are doing in a space and (2) goes against our ethos as librarians. Unless they are engaging in harmful or illegal activity, we generally do not police what users do in our space. Ultimately, HCE agreed to let that issue go, perhaps persuaded by the Libraries' argument that we had a lot of practice at designing spaces so that intended uses would happen in them without aggressive oversight. Also, we all agreed that we wanted this space to be as inclusive and accessible as possible, and asking people to leave in this way would be counterproductive. Later in the process, HCE pushed for a membership model for the space as a way to build community. While HCE wanted the membership to be free and lead to special perks rather than serving as a model for exclusion from the space and services, the membership concept still was off-putting to many people in the Libraries. We instead compromised and kept the concept, were careful to avoid exclusionary policies, and refer in our communications to "joining the Toaster community" rather than using the word "membership."

Operations

Operations questions were mostly put aside as we focused on the remodel, but we did need to resolve some issues upfront in order to move forward. As we outlined how the space would actually operate, HCE came forward with a plan and money in hand to fund two full-time staff positions and a large contingent of student workers for the space. These kinds of positions are not typical for libraries when we create new spaces and felt quite luxurious to us. We were excited about the possibility, but simply do not have the budget to contribute to this staffing over time. We were concerned that if we in the Libraries did not help pay for these staff, they would essentially be outsiders stationed in our space and we would lack any agency over their work. At some points, our HCE partners questioned our commitment because we were not able to share this direct cost. To address these concerns and demonstrate our commitment, the

Libraries prepared detailed plans that allocated time from existing Libraries' staff toward this space, with dollar amounts attached. We were also candid about the Libraries' budgetary constraints. This led to the unique model where, while the two positions are funded by HCE, they report up through the Libraries. This not only showed our in-kind administrative commitment, but also ensured the libraries would be deeply involved in all programming and operations. Ultimately, these frank conversations moved us past any impasse and led to a signed MOA.

Details of the MOA

The MOA provided a tangible document through which both parties could surface their intentions and also respond to one another's wishes. In the MOA, we were able to be precise about the space we were designating for the Toaster and ongoing required public access and egress requirements. We agreed on the duration of the initial partnership, which is for a five-year period. We outlined how the MOA would be renewed, and also the amount of notice required by either party to exit the agreement prematurely. We also put in writing how we would reimburse one another should the agreement be breached or terminated by either partner. Language was included to address priority use and access to the space and how decisions about use would be arbitrated. The Libraries proposed an oversight committee in this regard to establish detailed policies, oversee programming, and resolve disputes. The MOA included language that affirmed the space and its operations as ultimately belonging to the Libraries, but indicated the extent to which we would aim to partner on developing a budget, establishing staffing and programming, and outreach. Finally, the MOA included a detailed paragraph with the budgets contributed by each partner toward the space, including exact dollar amounts per year as well as estimates for indirect contributions such as staff time or shared operating costs. We also agreed in the MOA to jointly pursue grants, donations, and additional partners to grow the budget.

Planning the Space

The design and early planning process came to be more complex than simply a coat of paint and new carpet. We were able to move out the collections ahead of schedule and find space in our existing stacks or storage caverns for all of the volumes we kept, so this part of the move was actually simpler and less costly than anticipated. However, when it came to remodeling the existing space, HCE wanted to engage with the university architects and classroom technologists in order to explore options and get expert opinions. That opened us up to a slower and more involved design process, adhering to the regulations and processes that are likely familiar to any readers who work in a large state university.

Communications

As the collections move and early design conversations unfolded, HCE and core library staff met regularly to brainstorm use cases and host student feedback sessions in order to contribute to the future design. Our partners at HCE hired a student-run advertising agency to develop branding and communications recommendations for our space. Working with students in this capacity was fun and interesting, and they ultimately led us to a color palette, look and

feel, and the name for the space: the Toaster Innovation Hub. It took some selling to bring all of Libraries and CSOM staff on board with the name, but the students had done their homework. They told us the Toaster was a fun, playful, and unique name for an innovation space and had a local tie—the pop-up toaster was invented in Minnesota. Staff and administration agreed to go along with the students' recommendation, even if they didn't quite get it.

New Partners

Working this intimately with a new university partner surfaced some culture clash issues. First and foremost, we represented two large university units who were not deeply familiar with one another. We did have a handful of staff in each unit who had long worked closely with the other, including our business liaisons and some of the faculty and staff in CSOM. However, for the most part, there was not a deep well of familiarity and trust to draw upon. CSOM made heavy use of our business liaisons and electronic resources, but unlike some other university partners, were not deeply attached to our other collections, spaces, or other missions like general reference, digital humanities, or special collections. Outside of the business liaisons, the Libraries' staff were generally somewhat skeptical of CSOM's motivations and suitability as a partner. There was some overall grumbling in the Libraries that our core values were far apart because the Libraries serve everyone and are not profit-driven, while the business school is "all about money" (a complaint shared with staff involved in the project, including one of the authors of this paper). Could we really come together as true partners when we did not have deep understanding or even value what the other partner saw as their core mission?

Cultural Differences

The Libraries and HCE are also different in size and operating cultures. While HCE is a part of CSOM, they are a small and relatively independent unit. They have six dedicated staff members and are privately funded. Their position at CSOM could be seen as a microcosm of patterns in the overall business world: HCE—as the scrappy entrepreneurs who value creativity, independence, and being nimble—set themselves apart from the big, slow-moving corporate behemoths (the business school) where change is hard to make happen. In this framework, the Libraries are unexpectedly more akin to CSOM or a big corporate entity. Unlike entrepreneurs and HCE, the UMN Libraries operate more like a big business: bureaucratic, hierarchical, and process-oriented. We have over 300 staff, 12 library buildings, and over 7 million volumes in our collections (UMN Libraries 2019). While we are an innovative library and value creative approaches to problems, we are guilty of forming too many committees and taking a long time to study and report on issues. We are always trying to be more flexible and open to change, but our size and collaborative style slows our progress. The Libraries are also oriented toward a set of professional values that are deeply meaningful to us, but are not necessarily well understood or shared by HCE. Many library staff have attended library school or are members of professional associations where we develop norms around issues like access for all, privacy protections, and public service. These values infuse our approach to both space planning and also forming partnerships outside the libraries.

Building Trust

Despite these cultural differences, trust grew over time as we embarked on this complex project together. By conceiving of program goals and designing the space collaboratively, we were forced to reach consensus and listen to one another's perspectives. Each side shared a lot of statements such as "the Libraries cares most about..." or "when we work with students, we…" While many people bemoan meetings, in this project, frequent in-person meetings were crucial to getting acquainted and building trust. We overcame several occasions when we were at an impasse over major decisions through honesty and directness, including moments when one side or the other stated that without resolution they could not proceed. Like all good relationships, boundaries were crucial. We each had to know our own "non-negotiables." For the Libraries, our primary goal was providing a welcoming and vibrant space to all students. For HCE, their primary goal was fostering innovation among a broad range of students. These goals are in fact quite similar, and differences mostly exist around the margins. In retrospect, there was a surprising degree of alignment that hardly needed discussion. For instance, we aligned easily around the design of the space, the staff we eventually hired, and branding and marketing. Now that we are engaged in promoting the space around campus, our messages are truly in sync.

Next Steps

Maintain Partnership in Operations

Now that the negotiations and broad view planning is behind us, we are working to hammer out the details required to run the space which opened in late February 2020. These details such as workflow, policy, and programming, primarily fall to the Libraries to determine. This is partly due to the unique reporting model where the dedicated Toaster staff report through the Libraries. We still regularly meet with HCE, but the Libraries are responsible for turning the big picture ideas from HCE into reality. Our process for developing policy and operations workflows has been to work internally in the Libraries (Toaster staff and relevant Libraries staff) and then bring drafts to HCE for review. The trust that we have built over time with HCE has led to little micromanaging during this step in the process.

Because the space was only open for less than a month, the reality of our planning is still to be determined. The first few weeks were generally felt to be very successful, with a lot of buzz from students, a full programming schedule, and excitement from across campus. We expected there would be many unanticipated issues and decisions that would arise, especially during the first few months of operations. However, we obviously did not anticipate the COVID-19 pandemic and the need to shut down operations. While the library remains closed, we are working to keep the momentum going by moving our programming and community online. We are uncertain what we will be able to do in the Toaster in the fall if students are on campus, and are rapidly developing scenarios and thinking through the various implications. Thankfully, the trust and partnership we built in the early days is helping us continue to work collaboratively in adjusting on the fly to this unpredictable and difficult reality. We will need to continue to work closely with our partners both on practical matters such as programs and budget, but also in continuing to reaffirm our shared values and goals even as our carefully-laid plans have so

drastically changed. This partnership will therefore need ongoing maintenance, but the strong base of trust that we have built through the process thus far will aid in making this project a long-term success.

Leverage this Project to Further the Libraries' Goals

The Libraries' goals with this partnership are not only to open a unique space with a new partner, but also to leverage this opportunity to gain entry into broader institutional initiatives around innovation, entrepreneurship, and experiential learning. From what we have observed in terms of resource allocation trends, we believe the University will continue to develop and grow its emphasis on research commercialization. The Libraries, however, fights against inherited and outdated understandings of our role on campus. Too often, partners on campus are surprised by our expertise in new technology, inclusive spaces, and advanced research support. We want to be recognized as having something to offer for every stage of the research cycle, including pathways to business development. The Toaster facilitates a literal seat at the table for the Libraries when innovation efforts are discussed on campus. We are forming a high-level steering committee for the Toaster, chaired by HCE and the Libraries, comprised of innovation-focused stakeholders from across the University. We know from a variety of conversations that these stakeholders look at the Toaster as a useful test case for future centers, initiatives, and buildings. At such a decentralized campus, it is noteworthy and experimental for two partners like HCE and the Libraries to join together in such an integrated way. Future efforts will need to learn from our experience. Finally, by helping to make the Toaster happen, the Libraries has demonstrated that we are reliable and eager partners for other related endeavors.

Conclusion

Academic libraries are increasingly looking for ways to support innovation and also transform our spaces. While libraries have a history of working closely with academic support units, our experience partnering with the Holmes Center for Entrepreneurship represents an emerging collaboration model for academic libraries. We think our reflections on this partnership and developing the Toaster provide a number of useful lessons for other academic libraries considering a similar kind of venture. It was important for us to have our own goals for the space and the project from the beginning, and to be aware and forthright about opportunities for compromise as well as non-negotiables. In a decentralized institution like ours, monetary contributions were important to acknowledge and try to equalize. Partnering outside academic support units on campus requires libraries to navigate and integrate with different institutional cultures than we may have previously. In the case of the Toaster and HCE, we found it particularly important to have frequent in-person contact in the form of informal conversations as well as formal brainstorms. We also established foundational shared goals at the very outset of the work. We are currently establishing structures that will make our future operations as fluid as possible, such as shared responsibility for staff and formal steering and operating committees. Perhaps the most valuable insight we can offer is that ultimately, the Toaster is only positioned to achieve our goals because of the intentional interdependence of both entities involved. The Toaster's success will come from combining the Libraries' experience creating active, inclusive spaces together with HCE's risk-taking nature, vision for innovation, and deep experience creating popular and successful programming for students in these areas. Working together, we are able to launch this exciting and important space and program for students on our campus.

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