

## **Rebranding the Library Through Engineering Outreach: Three Case Studies at the University of Waterloo**

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# Rebranding the Library Through Engineering Outreach: Three Case Studies at the University of Waterloo

## Abstract

In 2023, with a full return to in-person learning post-Covid-19 lockdowns, Engineering Librarians at the University of Waterloo seized opportunities to explore new programming and partnerships. This paper presents three case studies of collaborations involving librarians from four different departments within the Faculty of Engineering at the University of Waterloo, as well as a brief examination of key takeaways, lessons learned, and future potential. While each of these cases details a collaboration with a different department, this paper will outline how the impetus behind and the outcomes stemming from these collaborations are related: Waterloo's engineering librarians are dedicated to rebranding the Library as a key element to academic success.

The collaborations include a semester-long co-curricular program, the strategic inclusion of library services into wellness programming, and an interactive multi-part stakeholder workshop. The focus of the collaborations included experiential learning, project-based learning, and wellness, and all collaborations involved librarians joining with external groups and stakeholders to broaden impact. In each of the three cases, the initial ask was not for information literacy (IL) instruction – or even for librarian support – but by identifying a point-of-need and having conversations with campus colleagues, librarians have made themselves a fundamental part of interesting partnerships. These experiences demonstrated how librarians are ideal collaborators, and partnerships are more engaging when they combine personal and professional areas of expertise. While IL was not the aim for any of these collaborations, they all became a natural fit to integrate IL skills, and have three consistent themes throughout: 1) *Fostering Relationships over time*, 2) *Building a culture of trust*, 3) *Saying yes*, each of which can be continue to be used when launching new interesting initiatives and projects.

**Keywords:** Collaboration, experiential learning, library, partnership, project-based learning, wellness.

## Introduction

In 2023, with a revival of in-person learning and a strong desire to reignite campus connections to the Library, Engineering Librarians at the University of Waterloo decided to try something new – actually, a lot of new things. While the Library is often perceived as an information resource hub, and the role of the librarian has been tied to the use and management of those resources, librarians are finding success by creating and fostering roles outside that norm. The University of Waterloo is home to several widely regarded programs in Engineering [1]. While Engineering is one of six faculties at the school, Engineering students make up nearly one quarter of the student population [2]: between graduate and undergraduate programs, there are 8399 full time equivalent students enrolled in engineering programs. The Waterloo Library uses

a liaison model, with four librarians supporting programs within the Faculty of Engineering, but some of whom also support departments outside Engineering. These librarians work at the Davis Centre Library, which is the STEM-focused Library at the University of Waterloo.

The University of Waterloo's Engineering programs are academically rigorous and are known best for their unique immersive experiential learning opportunities. Engineering students participate in co-op throughout their undergraduate degree, and during their on-campus semesters Engineering instructors continually look for ways to integrate real-world experiences into the classroom. In recent years, Engineering Librarians at Waterloo have been aligning their own practices with this dynamic learning approach and have been exploring ways to expand stereotypical perceptions of the library, building new partnerships and fostering creative ways to engage in the classroom and beyond. This paper will explore collaborations between three Engineering liaisons at Waterloo and their respective departments – Systems Design Engineering, Electrical and Computer Engineering, Mechanical and Mechatronics Engineering, and Entrepreneurship. In each case, the initial ask was not for information literacy (IL) instruction – or even necessarily for librarian support – but by identifying a point-of-need and having conversations with campus collaborators, librarians have made themselves a fundamental part of each program. The collaborations include a semester-long co-curricular workshop series, the strategic inclusion of Library services into wellness programming, and an interactive multi-part stakeholder workshop. The collaborations included experiential learning, project-based learning, wellness – and sometimes a combination of all three – and involved librarians joining with external groups and stakeholders to broaden impact [3], [4], [5].

Through this experience we discovered a key strength in having collaborations that blend both personal and professional areas of expertise [6], [7], [8]. Even when IL was not the focus for the events, there were natural opportunities to integrate IL skills: finding information in non-traditional ways, learning about differences in primary vs secondary research, learning how to ask good questions, and learning to incorporate new information into your research project all emerged in a less formal way, encouraging discussion rather than top-down teaching [9], [10]. This approach provided opportunities to alleviate stress for students, demystify the research process in Engineering, and acknowledge the growing importance of navigating diverse and changing sources of information.

## Literature Review

No singular paper or study informed our approaches to collaboration, but when we consulted the literature, we discovered that there are common themes published about successful collaborations that echo our experiences. Collaboration is a key component to a librarian's success in higher education, particularly for patron-facing roles such as liaison or subject librarians. Collaboration is an ideal way for librarians to better engage with faculty in their liaison areas – and to reach students through integration into their courses. In 2020, Perez-Stable, Arnold, Guth, and Meer studied common forms of collaboration between librarians and faculty: “the most common form of collaboration was having a librarian teach in a course session, ... followed by having an online course guide, ... and making a referral to a specific librarian. The

least common forms of collaboration were having a librarian presence in the course management system (CMS) [and] having collaborative learning outcomes” [6, p. 56]. Pham and Tanner report on the most common aims of librarian-faculty collaborations: “Their partnership entails a range of activities such as developing library resources, facilitating resource access and discovery and embedding information literacy skills and research skills into the tertiary curriculum” [7, p.15].

That the majority of these papers are published in library science journals, by librarians, speaks to the importance of collaboration to a librarian’s success [6]. It also speaks to how proactive librarians must be to engage with campus partners and sustain these relationships. Notably, the above examples all focus on a librarian supporting teaching initiatives in mostly traditional ways. However, in recent years the literature has trended towards examples where librarians are supporting students and faculty beyond the established norms: “Changing technologies, environments, and needs have shaped the role of the academic librarian into less about resources and more about making connections and helping students and faculty” [8, p. 150]. In 2019, Corrall and Jolly describe this shift as “the social turn in library innovation”, where librarians focus more on “community-oriented service models” rather than strictly collections [9, p. 122]. In this community-oriented approach, librarians take a holistic view of the student experience and aim to support students beyond the classroom [9]. In 2020, the Association of College and Research Libraries (ACRL) identified “supporting well-being on campuses” as one of the top trends in academic libraries [9, p.4], [10]. And while the end goal may be the same - to help students find and access information [6] - librarians are increasingly doing so by supporting non-academic campus partners and initiatives.

What is more difficult to find in the literature, perhaps because it is dependent on unique individual contexts which makes replication difficult, are examples where information literacy is secondary to the librarian themselves: where the partnership or collaboration emerges not just because of the librarian’s expertise in IL, but because of the other skills, expertise, or information they uniquely bring, which this paper will explore further.

## Methods

This paper outlines three distinct case studies at the University of Waterloo to explore how these librarians approach outreach opportunities in their work. Through an intrinsic case study [11] the authors aim to understand how librarians’ collaboration efforts can adapt and change to support campus partners in different contexts. To this end, this paper reports on the experiences, advantages, and lessons learned by adopting new roles outside a librarians’ traditional duties. While this paper provides concrete examples for adapting these concepts in programs at other institutions, the aim is not to create a guide on how to replicate these collaborations, but rather to explore how the emerging themes outlined below provide context for differing approaches to librarianship for the future.

### Case Study 1: Biomedical Stakeholder Cafe

The Biomedical Engineering program at Waterloo is a multi-disciplinary program in the Systems Design Department where the librarian's involvement in diverse aspects of the program reflects this. The Biomedical Librarian is involved with the department at a curricular level, sitting in on design critiques through several graded aspects, and working with faculty members through every year of the degree for the design classes, notably with the two senior capstone courses SYDE and BME 461 462. The librarian meets with student capstone groups to discuss their projects and refine how diverse sources can contribute to their success, and then find the best information as they go through the design process through to the final paper. These consultations were very well-received by students and faculty advisors.

Post-pandemic, the librarian was involved in several discussions about supporting students as they returned to in-person classes and had to navigate new challenges, such as integrating stakeholders into their design process. Incorporating stakeholders into the engineering design process is vital for the ultimate success of the design. Undergraduate engineering students are faced with not only navigating unboundaried amounts of information to support their capstone projects, but how to balance formal information, such as standards, with informal information, such as stakeholder perspectives [1]-[5]. Design processes such as user-centered, human-centered, and codesign emphasize user involvement through the entire design process, and increasingly this is changing how engineering students are approaching finding information [2]-[3]. Students are tasked with finding information out about their users and, while processes like personas can help, experiential learning opportunities where students are able to talk one-on-one with actual stakeholders are invaluable to their learning and to the ultimate success of their projects [6]-[8]. To support students through this somewhat intimidating process, the faculty member in charge of teaching SYDE 362 and the Systems Design librarian began to realize an idea for creating a Stakeholder Café- a place where facilitated access to various community stakeholders would support student learning [12].

Developing the event was a lengthy process with over a year of planning and preparation going into finding and securing funding, identifying external people to participate as experts, a competitive application process for student groups, and matching student groups with expert stakeholders. There was significant campus and departmental support for the project, which obtained financial support from an internal grant the librarian received from the University of Waterloo LITE grant, and support from the Office of the Engineering Dean and the Library around resourcing, time, and space. One factor that strengthened this project's success was the librarian and faculty members bringing their own personal connections, both on and off campus, to participate as stakeholders. The program benefited by having two project co-leads from different departments, with different backgrounds and connections, who could blend their different areas of expertise for improved success.

The event ran in fall 2023, with over 23 capstone groups, and 18 stakeholders involved, and was the first of its kind on campus [13], [14]. The stakeholder interactions were focused on a needs assessment, where students aimed to develop a meaningful understanding of their problem space, and then translate this into engineering specifications. Prior to participating in the Café, students had to attend a mandatory seminar run by the librarian focused on talking with people. This was run with the specific intention of broadening the narrow view of information literacy. The workshop discussed finding and using diverse types of information – from patents and standards to peoples' lived and professional experiences. The librarian also discussed the importance of

language, terminology, and being respectful. For example, in engineering, “stakeholders” is a clear and defined term that refers to a specific type of interaction. However, the workshop discussed how term should be avoided when working with diverse groups, including Indigenous populations, because it could have negative connotations. This was used as a teachable moment, in that sometimes we must call out the tension of using people as information sources, and ensuring respect is at the core of finding information, be it traditional resources, or in-person interactions. This collaboration between the library and the Systems Design department gave the librarian another significant opportunity to engage with students at a level beyond the classroom, and engage them in authentic, interesting conversations about IL.

## Case Study 2: Multifaceted Wellness Support

Student wellness positively correlates to their academic success, and students with strong research abilities have better skills, confidence, and resilience to overcome barriers that may arise in their information seeking practice [15],[16]. The Library is a key ally in developing these research abilities, but since it is a non-academic unit on campus it can be difficult to engage students beyond transactional tools and surface-level study tips. As a liaison for several engineering departments, one librarian built strong connections with the Engineering Wellness Coordinators within the Mechanical and Mechatronics Engineering, and Electrical and Computer Engineering departments. Working closely with student advisors and faculty members, Wellness Coordinators possess a deep understanding of the current student experience and department needs, facilitating a variety of supports for the physical and mental health of undergraduate and graduate students, guiding struggling students with nuanced referrals to relevant campus resources. Through conversations with Wellness Coordinators, the librarian raised awareness of library services that can support student wellness and raised questions about the best ways to advertise that support.

Frequently when librarians receive requests for help from instructors or students it is reactive, occurring after the patron has experienced a setback in their information seeking practice. While librarian supports such as one-shot workshops and reference services can be valuable interactions, often these solutions only address symptoms of larger underlying issues negatively affecting students [16]. For example, if a student plagiarizes or uses bad evidence to support their design decisions it is frustrating for instructors responsible for upholding rigorous engineering accreditation standards. It can be difficult to determine whether the student intentionally cheated or made a crucial mistake due to research skills compromised by being tired, stressed, and unwell. While this situation is regrettable and the consequences are severe, an earlier intervention can help mitigate this occurrence [15]. The librarian and Wellness Coordinators identified a specific challenge: how can the Library’s value effectively be communicated when students are saturated with emails and events from the institution? Rather than trying to compete with this background noise, their solution was to utilize the network of trusted Wellness Coordinators and student leaders to amplify the Library’s offerings through several different interventions.

The first collaboration was possible thanks to a Wellness Coordinator facilitating an introduction between the librarian and the president of that department’s graduate student association. The president shared that their association had been struggling to create events, and that students had recently been commiserating over the stress of starting the literature reviews necessary to finalize their thesis topics. After discussing this with the student leaders to better understand what aspects

were causing the most stress, the librarian created a casual meet and greet event exclusively for that graduate student association, with a workshop component customized to their unique information literacy needs. The student association promoted the event to their membership through emails and social media, and incentivized attendees by offering a free lunch. One student anecdotally shared that they usually do not read all emails from the university but, since this one came from their friend, they paid attention and decided to attend. The positive effects from this event were immediate: the librarian had an increase in research consultations with those graduate students, but also with the undergraduate students for whom those graduate students were teaching assistants. Librarians often have a unique position on campus where they are viewed as trusted authorities on finding and accessing information, yet less intimidating than the instructors and supervisors deciding their grades [17]. This positive sentiment can help students become comfortable with sharing the research challenges they may be experiencing. Through acknowledging this trust, non-judgmentally listening, and providing advice, the librarian strengthened students' sense of being supported by the Library, and the likelihood of ongoing interactions.

The next collaboration with the Engineering Wellness Coordinators was writing a guest column for a wellness-themed newsletter produced for graduate students and distributed via internal email lists not publicly available. Being trusted with this access not only helps the Library's information stand out, but also adds credibility due to the departments' tacit reinforcement of the information's value. This newsletter is written in a conversational and positive way, encouraging humor and designed with bright colors and images. Compared to official university communications which can be rigid or impersonal, this tone helps with engagement by humanizing the librarian to the readers and emphasizing the approachability of the Library. To match this tone, the guest column was titled "Research Tips and Tricks" and introduced key strategies and supports in relatable ways without Library jargon, such as presenting LibGuides as information toolboxes, pitching research consultations as personalized coaching on research methods, and encouraging the use of reference management software to enhance efficiencies and reduce stress. Recognizing that financial pressures are a significant stressor for students [17], the column also emphasized free resources available in the Library supporting wellbeing such as board games, puzzles, and popular reading material, in addition to equipment such as phone chargers and assistive technologies. The fact that the librarian understood and addressed the holistic student experience, rather than just the academic aspect, helped rebrand the Library as a central support [17], [18]. The column was well received by the Wellness Coordinators and again increased research consultations, with the librarian being invited back the following term to write another guest column, with an open door for future collaborations.

A unique strength that the librarian brought was their accessibility expertise from their leadership of the Library's accessibility services. While accessibility services are not often associated with the Library [19], this librarian's practical experience creating personalized accommodation plans for students with disabilities and diverse learning needs was an asset to their collaboration with the Engineering Wellness staff. The librarian and Wellness Coordinators worked together to streamline referral processes to the Library's accessibility services, ensuring respectful and attentive support for all students. These efforts resulted in more engineering students using accessibility services in the Library. With increased awareness and utilization of these specialized Library services, the librarian successfully advocated for the purchase of additional borrowable assistive technologies at other libraries across campus. Finally, the librarian collaborated internally with the Library's Communications team and accessibility specialist staff

to develop and share social media content. This social media content was then shared with the Engineering Wellness team, to be further distributed through their social media accounts utilizing their network to reach students through multiple channels. This relationship is important and ongoing, not only contributing to creating an inclusive campus, but also elevating the perception of the Library beyond traditional stereotypes.

### Case Study 3: Foundational Entrepreneurship Instruction

Entrepreneurship programming at the University of Waterloo happens at both the curricular and co-curricular levels. One long-standing collaborator has been the campus incubator, Velocity, which attracts many students from the Faculty of Engineering. Each semester, the Entrepreneurship Librarian provided a standalone research workshop, encouraging students to research their innovative ideas deeply before jumping to provide solutions. While this workshop was always well-attended, the impact was unknown, and few students returned to seek research support. When Velocity approached the library about collaborating on a semester-long workshop series the Librarian was excited to further expand this relationship in a meaningful way. In spring 2023, Velocity and the library piloted a program called Foundations: The Happiness Project. In this 8-week workshop series, students would devise solutions to the mental health crises affecting today's young adult population. The program focused on teaching core entrepreneurship skills, such as market research, stakeholder engagement, and innovation mindset to students, and provided them with experiential learning opportunities. Through this program, students gain access to staff supports from across campus in order to learn more about what services campus already offers and what constraints exist; empowering them to create realistic recommendations for problems affecting them and their peers.

Initially, Velocity's request to the library was primarily for use of the space. Since the library is a physically central, domain-neutral space, it is an ideal location to attract students from all departments. During the Foundations pilot, Velocity staff planned and provided most of the program, and the librarian contributed her standard, stand-alone research workshop. However, the librarian provided consistent support by attending each weekly session, and interjecting advice or ideas when appropriate. By fall 2023, when Velocity aimed to turn this pilot into a consistent, semesterly 10-week program, the Entrepreneurship Librarian became the most obvious collaborator because she was intimately familiar with the program aims and outline. During the program re-development stage, Velocity's Problem Lab Manager and the Entrepreneurship Librarian pooled their list pre-existing campus connections, such as the Centre for Teaching Excellence, the Office of Human Development, and other entrepreneurship programs, to create a more cohesive program that aligned better with Velocity's initial goals. Throughout the program, the librarian used her information literacy expertise to support students in identifying primary and secondary research opportunities. Students explored journal articles, news articles, and statistics to uncover existing solutions, then identified and interviewed stakeholders supporting mental health across campus. However, this collaboration required the librarian to stretch beyond her existing areas of expertise by facilitating activities and focus groups on sensitive subjects, and building stakeholder relationships that will support students through the program. Ultimately, being a true collaborator on this project has required the librarian to re-evaluate what a typical liaison role might entail.



The collaboration between the library and the campus incubator has allowed the librarian to engage more deeply with both Velocity and with students, and to do so on a more consistent, long-term basis. A key takeaway from this collaboration is that the librarian was not deterred by the initial ask: while members of the incubator understood their need for a neutral space to host the program, the librarian understood the value she could bring, both personally and professionally, and was persistent in her efforts to collaborate more closely. The Entrepreneurship Librarian interjects IL lessons when appropriate, such as discussing the differences between primary and secondary research and supporting students in accessing both types of resources. The librarian's presence also created a culture of research inquiry that led to students' resource sharing amongst themselves to support their individual topics, but the librarian's role in the program extends well beyond standard IL instruction. The librarian has a personal interest in the program theme of mental health, and she has been able to bring her own experience and empathy around the topic to this collaboration. While mental health literacy is not the librarian's professional area of expertise, the soft skills she brings to the program have allowed for more earnest, engaging classroom discussions. In turn, students are eager to reach out to the librarian outside of class time.

## Discussion

The main goal of this paper was to explore unusual ways librarians are changing our approach to connecting with students and collaborating with campus partners in meaningful, interesting, and engaging ways. The pandemic and its aftermath changed the way students engage with higher education institutions, so how we interact with them must change too. To this end, three themes emerged from our collection of case studies, representing a renewed outlook on how we approach our work: 1) *Fostering Relationships Over Time*; 2) *Building a Culture of Trust*; and 3) *Saying Yes*.

### Fostering Relationships Over Time:

The first theme from each project is *Fostering Relationships Over Time*. Many successful collaborations, including the ones presented in this paper, are examples of “significantly strengthened relationships or partnerships” [9, p. 123], where collaborators have worked together prior, and their working relationship has evolved. By focusing on relationship building through liaison work, librarians can see success through repeated collaborations [20], [21, p. 162]. This is reflected in all three case studies, where the collaborations are iterations of working relationships fostered and strengthened over time. In the case of the Velocity program, Foundations, the librarian had worked with Velocity consistently for eight years, and with the program co-lead for five. The librarian had provided a once-a-term workshop but, more importantly, she engaged in conversations in between these instruction sessions, to learn about ongoing challenges and help determine what research gaps remained. This long-standing collaborative partnership was vital to the success of the newly established program, Foundations. When Velocity identified that a more research-centric program would help students with problem validation, the librarian could identify what IL skills would be valuable, and how they might scaffold to other programs as well.

Similarly, the Biomedical Stakeholder Cafe represents the next phase of a long-term professional partnership between a faculty member and the Systems Design librarian, which began in 2017. The collaboration between the library and SYDE/BME includes one-on-one check ins with student groups, giving a class presentation, and having ongoing consultations with the student groups around navigating the diverse types of information they need to be successful through each year of the design classes. In the first two years, the librarian plays a slightly lesser role. However, in the third-year pre-capstone class, the librarian meets with student groups twice, in part to give a baseline presentation on finding information, including a discussion on what is “information” and how to incorporate specialized information into their research, including lived experiences. For the fourth-year capstone project, the librarian is an active member and participant of the teaching team.

The collaborations developed with the Engineering Wellness Coordinators also exemplify the value of long-term sustained efforts to build and maintain relationships. Through repeated interactions it allowed a camaraderie to evolve, which encouraged open and honest discussions regarding the successes and challenges of helping students. Through years of communication a solid foundation was established, fostering a mutual respect and understanding of the work being undertaken and the nuances of the people involved. The librarian and the Wellness Coordinators although working across three different departments, and responsible for various aspects of the student experience – recognized how each other's distinct contributions were complementarily enhancing the wellbeing of students. By coordinating efforts, everyone involved benefitted from positive outcomes. This perspective is supported in the literature, described by Love and Edwards in their 2009 article *Forging Inroads Between Libraries and Academic, Multicultural and Student Services* where they write, “The key is recognizing the specific and unique needs of students, understanding the information component of these needs and seeking out collaborators to assist us in addressing those needs” [22, p. 24]. With this foundation of shared goals and values, trust was earned unlocking opportunities for taking risks with new and creative initiatives.

#### Building a Culture of Trust:

The second emergent theme, *Building a Culture of Trust*, speaks to the importance of trust, honesty, and equity to the success of each collaboration. Bladek’s 2021 paper, titled *Student Well-Being Matters: Academic library support for the whole student*, highlights numerous ways that libraries and librarians are reaching beyond traditional roles to support students’ full experience through higher education [18], but with these new endeavors come unpredictable outcomes. By promoting Library services to combat stress and anxiety, the librarian opened his door to those conversations and to being considered a support person himself. The Wellness Coordinators collaboration speaks directly to the importance of open and honest conversations – both with students and with fellow staff. In fact, this culture of trust is crucial for staff supporting health and wellness initiatives, as this sensitive work requires significant personal investments of emotional labor and time, often working with vulnerable students in crisis.

Foundations and Stakeholder Cafe examples highlight other ways where librarians engaged with students at a human level, outside their academic studies and the typical student-librarian

relationship. In Foundations, the program co-leads devised the program to center student voices through facilitated discussions and small group activities. Because the program focused on student mental health, it was imperative that students felt that their voices were being heard so that they felt empowered to make changes. Developing the Biomedical Stakeholder Cafe required the use of the librarian's personal and professional connections: for instance, stakeholders included her mother and neighbor, and other professional connections. During the preparatory workshop, the librarian told the students that a big part of the success of this workshop was a leap of faith for everyone, where biases are confronted, and part of that was transparency where she disclosed her personal connection to some of the participating stakeholders. This emphasized trust going both ways, and engaged the students in a different way than other workshops and one-off instruction does. The trust between the students and the librarian and faculty member leading the program emphasized that even though this was academic in nature, it was also personal.

### Saying Yes:

The third theme, the idea of *Saying Yes*, is one that resonates through all three case studies. While they each came about in different ways, and build upon different relationships, they all included the fundamental idea of saying yes to something that fell outside of the expected duties of the librarians' jobs, but well within the flexibility of the official Liaison Librarian job description at this institution. It should be noted that while each of these projects was working to say yes to projects that are uncustomary in the librarian role, they are each deeply tied to the University's strategic plan, the Library's strategic plan, and several key University of Waterloo initiatives, such as experiential learning and bridging connections between society, health, and technology.

The Biomedical Stakeholder Cafe started as a passion project between the lecturer and the librarian; but bringing the project to fruition required saying yes to taking a chance. The partnership between the librarian and the faculty member was long-standing, but the idea of agreeing to a project of this scale, that neither had completed before, was a significant step. Creating this non-traditional event required working outside of typical office hours, engaging in new ways with on and off campus partners, and – most importantly – thinking deeply about what information was, what it meant to explore non-traditional information sources, and focus on what the students needed.

As aforementioned, the Entrepreneurship librarian initially gave a standalone research workshop for Foundations, but as the program blossomed, the librarian was called upon to integrate IL more creatively into student-centric classes. Instead of lecturing about market research tools, the librarian co-facilitated gaps analysis discussions where students self-identify their research needs and the librarian offers suggestions more subtly. IL is still present in the workshop series, but it is embedded in larger topics, and pointedly never includes database demonstrations. Anecdotally, we discovered that when IL topics are integrated into the full program – rather than relegated to an isolated lecture – there is a better chance for student uptake. In this case, students began resource sharing amongst themselves as they researched their topics of interest. Agreeing to be a co-lead on Foundations required the librarian to embrace new approaches to her work, like

facilitating instead of teaching. The collaboration has required the librarian to continuously adapt and evolve to meet the needs of the students in the class, and of the campus partner, but it has also led to better outcomes for students, strengthened relationships with Velocity, and a great deal of professional growth.

The collaborations with the Engineering Wellness Coordinators reflect the value of saying yes to non-traditional opportunities that arise. Liaison librarian work involves significant sustained efforts to incrementally build in-roads with academic departments, with varying degrees of success dependent on the receptiveness and capacity of campus colleagues. When traditional classroom settings for Library instruction are not readily available, it can be very rewarding to explore lateral pathways through alternative networks. It can be difficult to establish and build a relationship with instructors who may be reluctant towards integrating information literacy skills into their curriculum. In contrast, the campus colleagues working to support those same instructors and students, but who are willing to immediately listen and share their time, offer a stronger starting point for collaborations. These pathways still represent opportunities to help students, and as an added benefit help demonstrate the value of the librarian to the department to scaffold subsequent initiatives.

### Limitations

There were challenges, of course, with each of these projects, including time, budget, and resourcing. Yet, these collaborations – and this new approach to our roles – were possible because of the Library culture, which encourages being curious, engaged, and being action-oriented. Support at the departmental and administrative level is essential to creating a flexible work environment, where librarians are empowered to explore new opportunities as they arise.

Library administration is supportive of librarians working flexible hours, which was beneficial when these programs took place in the evening outside of typical working hours. Administration also supports librarians restructuring their priorities to allow participation in these time-consuming programs. For instance, prior to the Covid-19 pandemic, engineering librarians taught 100% of their classes in-person; and many of these classes transitioned into online, asynchronous course modules during the pandemic. What is important to note is that when campus returned to in-person learning post-Covid, librarians did not reinstate in-person instruction for all of those classes. Rather, we evaluated the effort and the overall impact of some of these classes and opted to continue offering online modules for some lower-impact, time-consuming classes, which freed up more of our time to explore new opportunities. Ideally, if time and financial constraints allowed we could thoughtfully reconsider the efforts of our work in all areas in order to devote more time to high-impact programs like the ones outlined in this paper. However, it is worth noting that these high-impact programs also require more of our personal resources – our energy, empathy, and attentiveness – and there will always be limitations to how much we can reasonably, and effectively, participate in these types of programs.

What we hope this paper exemplifies is that librarians are best equipped to support the whole student when they show up as their whole selves. These case studies illustrate subtle, but monumental, shifts in the way we approach our work, and have created opportunities for

students, faculty, and staff across the University to see the Library as a partner in teaching, learning, and student support.

## Conclusion

While each of these case studies differs in the approach and subject matter of the collaboration, collectively they represent a marked shift in the way we do our work: centering collaboration and relationship building first and letting our IL expertise follow. Through the Covid-19 pandemic, we experienced drastic shifts to our work, with a particularly profound impact on teaching and in-person programming. In many cases, the pandemic permanently altered how students expect to be supported and placed new demands upon the faculty and staff supporting them. For librarians to be effective partners in non-traditional learning environments, we needed leadership that was supportive of flexible working hours, and open-minded to adaptations of our services to suit students' interests, lifestyles, and learning needs. The range of opportunities demonstrated in the above case studies are indicative of one of liaison librarians' greatest strengths: the ability to engage holistically, thoughtfully, and creatively with students, staff, and faculty. This versatility earns trust, reinforces relationships, and makes the Library an integral part of student success. In the future, we will continue fostering a "say yes" department culture and encourage colleagues to think outside the box – and outside the classroom.

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