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Jennifer K. Embree and Neyda V. Gilman

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The Library as a Campus Sustainability Hub: A Case Study in Increasing Community Engagement & Collaboration in Sustainability through Academic Libraries

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ABSTRACT

As the topic of sustainability becomes more relevant to all types of libraries, two academic science librarians share a case study on identifying and filling gaps in sustainability-related engagement, education, and collaboration at a mid-sized R1 research university. Seeking to transform their academic library into a Campus Sustainability Hub, the two authors began working towards this ambitious goal by establishing strong partnerships with sustainability-minded organizations and individuals both on and off campus, as well as by prioritizing the creation of community-centered programming that would engage audiences in sustainability content, research, and activism. After more than a year of building collaborations and fostering community engagement, they were successful in accomplishing their goal of establishing their academic library as a Campus Sustainability Hub. This case study provides more details on how the librarians reached this goal, including why they initially decided to undertake such a large task, how they chose to define a “Sustainability Hub,” what benchmarks they needed to meet in order to obtain this status, how they reached these benchmarks, and how they plan on continuing to grow this initiative.

Keywords: Sustainability, Sustainable Libraries, Academic Libraries, Sustainability Hubs, Sustainability Programming, Library Engagement

INTRODUCTION

In 2019, the American Library Association (ALA) declared sustainable development to be a core part of librarianship. The 2019 ALA president, Loida Garcia-Febo, stated that “Libraries are helping to better the education and the lifelong learning of the communities they serve. By adding sustainability to its core values, ALA is recognizing that libraries of all types can act as catalysts and inspire future generations to reach solutions that are not only sensible but essential to sustaining life on this planet” (American Library Association, 2019).

It is with these sentiments in mind that two librarians employed at the Binghamton University Libraries’ Science Library branch first immersed themselves in sustainability-related programming and collaborations on their campus. Although these initiatives were originally
pursued due to their personal passion for sustainability, they quickly realized the potential of channeling their enthusiasm and utilizing it to bring about greater change both within the libraries and within their campus community.

**LITERATURE REVIEW**

**Sustainability in Higher Education: AASHE, ACUPCC, & the UN’s Sustainable Development Goals**

Since the first Environmental Studies department in the United States was established at Middlebury College in 1965 (Kane & Sklar, 2014), campus communities across the world have been advocating for environmental sustainability to be a priority in higher education institutions. In 2005, the Association for Advancement of Sustainability in Higher Education (AASHE) was established, demonstrating the strong interest in integrating sustainability considerations into higher education settings. Perhaps one of the most cited examples of higher education institutions addressing sustainability is the creation of the American College & University Presidents’ Climate Commitment (ACUPCC) that was spearheaded by AASHE, SecondNature, and ecoAmerica in 2006. College presidents that signed this pledge committed their campuses to creating and implementing Climate Action Plans, measuring and reporting their greenhouse gas emissions, and making a concerted effort to reach a state of climate neutrality (“History of AASHE,” n.d.). While the original iteration of the ACUPCC was more focused on metrics reporting, such as emissions and energy output, it was later expanded to include broader commitments, such as providing support for sustainability research, education, outreach, and services (Jankowska et al., 2014). As of today, there are over 700 international institutions that have signed the ACUPCC (United Nations, n.d.).

**Sustainability in Academic Libraries: From Green Libraries to “Hubs of Sustainability”**

As interest in addressing sustainability on college campuses continued to grow over the past few decades, so too did the interest of academic libraries in addressing sustainability within the field of librarianship. Issues concerning the topics of sustainability and sustainable development in the library profession first appeared in the literature starting in the early 1990s. (Antonelli, 2008; Atton, 1993; LeRue & LeRue, 1991). At this time, librarians began to acknowledge the importance of addressing environmental concerns and impact within their organizations. For instance, one of the first such publications, “Libraries and the Environment,” published by LeRue in 1991, addressed the need for libraries to consider eco-friendlier operation choices, such as recycled paper and energy-efficient materials. This was also around the same time that the first sustainability-related initiatives and collective organization began to appear in librarianship, including the establishment of the *The Green Library Journal: Environmental Topics in the Information World* in 1992 (now known as the *Electronic Green Journal*), and the creation of the American Library Association’s Task Force on the Environment (TFOE) (Antonelli, 2008).

With the exception of a few publications that focused on what libraries can do to outwardly engage their communities in sustainability-related topics, (most notably ALA President Sara Ann Long’s Presidential Message “Libraries Can Help Build Sustainable Communities” that called for libraries to act as “catalysts” for sustainable development), for more than two decades (1990-
sustainability publications within the library field tended to be more focused on internal considerations (Applin, 2009; Ausilio, 2013; Loder, 2010). Common themes covered were green architecture (e.g. libraries built with sustainability in mind), green collection development (e.g. print vs. digital materials--which is more sustainable?), and green library operations (e.g. measures to reduce printing, conserve energy, etc.) (Jankowska & Marcum, 2010).

However, in the last decade, there seems to have been a shift in the library literature from focusing primarily on what libraries can do to address sustainability internally within their own buildings to what they can do externally to connect with the communities that they serve. In the 2013 article “Green Libraries are More than Just Buildings,” George Ausilio stated that academic librarians should strive to become leaders in promoting sustainability by focusing on what they can offer their entire campus instead of just focusing on the architecture of their libraries. That same year, Jankowska et al. (2013) published a study in which they surveyed 203 academic librarians on their level of engagement in sustainability education on their campuses. Of the 149 libraries that were represented in the survey, 25% reported that they were moderately to highly engaged in sustainability initiatives or activities.

As attention in the library sustainability literature began to shift more towards focusing on outreach, education, and engagement in the mid-to-late 2010s, some publications also began to recognize the strength of the library to serve as potential sustainability centers or “hubs” for their campus communities. These publications point out that academic libraries are often centrally located, provide learning and research services to diverse community members across all disciplines, and often already act as “information hubs.” All of these traits make them ideal locations for sustainability hubs (Charney, 2014; Nichols, 2014; Kane & Sklar, 2014; Hauke et. al, 2014).

Although no publications as of yet specifically call for academic libraries to serve as “Campus Sustainability Hubs” in these exact words, much of the literature that addresses sustainability in academic libraries seems to imply this by frequently emphasizing the importance of libraries to be directly involved in sustainability initiatives and to serve as sustainability partners, leaders, and influencers (Fedorowicz-Kruszewska, 2020; Hauke, 2018). This has also been reflected in the creation of several recent programs, policies, and official statements being made amongst professional library organizations and individual library systems (American Library Association, 2019). Resources and toolkits that inform librarians about how to approach sustainability education, literacy, collaboration, and community outreach have also been on the rise to share ideas on how libraries can actively involve their community in sustainability. For instance, ACRL recently published the The Sustainable Library’s Cookbook in 2019, which is filled with lesson plans and ideas for how libraries can actively engage in a variety of sustainability initiatives within their own communities.

However, one of the niches in the library literature that seems to have gaps is case studies for academic libraries that are interested in situating themselves as “Sustainability Hubs” on their campuses, especially in relation to navigating the many challenges and rewards of working towards reaching this ambitious goal. In 2014, Charney stated that, while surprised by how active academic libraries were in sustainability initiatives on their campuses, “formal connectivity among sustainability-minded librarians themselves is lacking” (p. 21). In just six years, much has changed to provide librarians with more formal connections to address sustainability issues, such as the formation of national and international committees focused on sustainability, the creation of active sustainability listservs, the founding of sustainability-related library grants etc. Yet, there are still
only a handful of published case studies that provide detailed accounts of academic libraries’ journeys in trying to start, grow, and sustain themselves as centers for sustainability services, outreach, and collaborations on their campuses. In order to mobilize academic libraries to work towards these actions, sharing experiences about how individual libraries have addressed sustainability initiatives in their own campus communities can serve as catalysts.

This article offers a case study from the Science Library branch of the Binghamton University Libraries system and outlines the strategies, events, collaborations, and initiatives that were undertaken to work towards filling the identified sustainability gaps on campus and eventually situating the library into a Campus Sustainability Hub. The ultimate goal of this Campus Sustainability Hub is to provide a space, both physical and virtual, where any individual on campus (faculty, student, staff, or researcher) can come to learn about, share, discuss, and engage in sustainability-related topics and activities, and to help cultivate a campus-wide culture where sustainability is highly valued and prioritized.

THE SCIENCE LIBRARY AT BINGHAMTON UNIVERSITY

Binghamton University has long prided itself on being a campus that strongly prioritizes sustainability, as evidenced by the recent award of a 2020 gold rating from The Sustainability Tracking, Assessment & Rating System (STARS) program run by AASHE (STARS, n.d.). The Science Library, which is the second largest of three libraries that make up the Binghamton University Libraries system, is centrally located on the main campus, right in the middle of the University’s Science Complex. It houses the majority of the print collections for the science subject areas, and its full-time staff consists of three faculty subject librarians, four professional staff members, and the Head of Branch Libraries.

When the two sustainability-minded science librarians were first hired they began seeking out opportunities to become more involved in sustainability-related opportunities on campus. As they sought out more information about the sustainability initiatives at Binghamton University, they realized that much of the strength of the university’s “green” status lies in its excellent sustainability research and coursework. The Sierra Club placed Binghamton University 7th out of 282 schools in its quality of sustainability research in their 2019 “Cool Schools” rankings (Sierra Club, 2019), and Binghamton also received the highest possible score in sustainable research from their 2020 STARS rating (18 out of 18) (STARS, 2020). The University’s sustainability research is so rigorous, in fact, that the latest edition of AASHE’s Campus Sustainability Index (2020), an annual report that highlights the top performers of higher education institutions across various sustainability metrics, listed Binghamton in a five-way tie for first place in research out of 336 institutions.

While the university’s research and coursework in sustainability is impressive, the authors also noted that there seemed to be a gap in the types of engagement opportunities available on campus related to sustainability, particularly for faculty and professional staff members not directly involved in research or teaching. After extensive observation, evaluation, and discussion with faculty, students, and staff regarding sustainability operations at Binghamton, two of the biggest gaps that the authors identified were 1) the very limited number of diversified engagement and outreach opportunities available to faculty and staff that are interested in participating in sustainability-related activities, learning about sustainability actions taking place on campus,
and/or networking with other sustainability-minded individuals, and 2) the lack of a centralized space, virtual or physical, that provides comprehensive coverage and support for sustainability activities, events, initiatives, opportunities, and resources for every department and division on campus.

After noting these current gaps, the authors decided that they wanted to help fulfill these needs by offering more engagement, education, and community-centered opportunities through the Science Library. The authors then began to build relationships, foster collaborations, and host events with a sustainability focus in order to establish the Science Library as a sustainability partner on campus. While these first outreach efforts were pursued due to personal interest and passion, the two authors quickly recognized that their shared interests in serving as avid sustainability supporters, promoters, and advocates could be harnessed to not only fill these identified gaps, but also position the Science Library as a central hub for sustainability. With this newfound goal in mind, the authors began to consider what is required to become a Campus Sustainability Hub.

What is a Campus Sustainability Hub? Creating a Definition that Fits the Library’s Vision

A hub, most simply defined, is a “center of activity” (Merriam-Webster, n.d.), and while there are references to libraries serving as a resource akin to “hubs” of sustainability, the official term of "sustainability hub" has never been defined in the library literature. In order to cement their overall vision for the Campus Sustainability Hub and to more effectively measure their progress towards meeting this goal, the authors believed it was imperative to formally define the term. A Campus Sustainability Hub was defined as an organization or collective, operating under an academic or research institution, that fosters collaboration, bolsters engagement, and provides additional active support for all sustainability-related education, initiatives, programming, research, and activism taking place within its community of faculty, students, researchers, and/or staff members.

The authors arrived at this definition by referencing the definition of a very similar concept called “Climate Resilience Hubs,” that was created by a non-profit organization known as Communities Responding to Extreme Weather (CREW). CREW defines “Climate Resilience Hubs” as “community institutions...that have committed to providing assistance to the community before, during, and after extreme weather events” (Communities Responding to Extreme Weather [CREW], n.d.). CREW is known to work very closely with libraries, and several libraries across the country have been designated CREW Climate Resilient Hubs, making their definition a relevant example.

The authors determined that the Science Library would need to successfully undertake two main objectives to establish itself as a functioning Campus Sustainability Hub: 1) foster collaboration by making strong connections with faculty and students to help cultivate sustainability research, and activism and 2) bolster engagement across the campus community by both creating and sponsoring multiple sustainability programming opportunities. Below are examples of how the authors, over the course of almost two years, worked towards these two objectives.
Making Connections: Collaborating with Faculty and Students on Sustainability Research and Activism

The first sustainability objective prioritized was making connections with other sustainability-minded organizations and individuals on campus. The authors recognized that establishing positive relationships and collaborating on sustainability initiatives with faculty, staff, and students would increase the visibility of the Science Library and greatly contribute to the earnest ambitions to become a Campus Sustainability Hub. Therefore, the authors collaborated with faculty members and student organizations on a variety of sustainability-related projects. Below are more details on how each of these collaborations were formed.

Establishing a Meeting Space for Undergraduate Sustainability Clubs

During the spring of 2019, librarians at the Science Library discussed the potential of working more directly with undergraduate student organizations. This decision was spurred by a desire to serve as an ally to students and student organizations interested in sustainability. The Science Library also wanted to increase its visibility as a strong advocate for sustainability across campus, as well as make it easier for students to partner with the Library on sustainability-related activities.

In order to establish these relationships, the authors reached out to student organizations with a sustainability focus to gauge interest in collaborations, and to offer space in the Science Library as a potential meeting place for their clubs. One organization that expressed interest in collaborating with the library for meeting space was a newly-formed undergraduate club on campus called Zero Hour. Zero Hour identifies itself as a climate change activism organization, whose main purpose is to educate the community on issues related to climate change and environmental justice. They were enthusiastic about the opportunity to use the Science Library as their club’s official meeting place, and discussions between the clubs’ founding members and an established librarian liaison began soon after the club formed.

Up until this point, none of the University Libraries offered meeting spaces in an official capacity to organizations outside of the Libraries, and so it was determined that a new meeting room policy for the Science Library would be created. The Libraries’ administration wanted to ensure that this policy prioritized space to clubs or organizations that had a sustainability focus. Therefore, when the policy was written, it included requirements that the clubs using the Science Library for meetings be willing to collaborate and co-sponsor at least one science-related event a year. Finalizing the draft of this new meeting room policy took several months. However, a finished draft was officially accepted in January of 2020, and that same month Zero Hour hosted their first meeting in the library (see Appendix A).

Bee Club & The Pollinator Garden

Another student organization that the Science Library established a strong collaboration with was the Bee Club. One of the authors met with a student that acted as a representative for both the Bee Club and campus food co-op in order to discuss possible collaborations. One of the resulting ideas was to collaborate on creating a pollinator garden. To do this, one of the authors reached out to Dr. George Meindl, an Environmental Sciences faculty member recommended by the Bee Club representative, and discussions began immediately. These discussions involved collaborating with facilities to find the best location for the garden, and to get official approval from university
administration. By the end fall of 2019 plans were in place to start the garden in the spring of 2020, once the ground began to thaw. A small amount of funding to purchase seeds was available through the Bee Club’s honey sales. Graduate and undergraduate students would work the ground, plant the seeds, care for the plants, and harvest seeds for the following season. Dr. Meindl and the author would act as support and assist where needed, including with the creation of ‘insect hotels.’ The Science Library staff and faculty would assist in creating signage for the garden and showcasing books and resources related to the plants and insects in the garden. Unfortunately, about the time that the ground was thawing and it was time to get started, COVID-19 led to the university operating remotely. The pollinator garden is still of interest to all involved and work will resume as soon as possible.

Another project that came from the discussion with the Bee Club was that of becoming a Bee City USA Bee Campus (https://www.beecityusa.org/what-is-a-bee-campus.html). The first meeting to discuss the application took place at the end of February 2020, again just prior to the COVID-19 pandemic. The Bee Club currently has new student leadership and work is underway to inform them of the project so they can resume where the project left off.

Sustainability Poster Sessions

Dr. Meindl not only assisted with the pollinator garden, but was also excited to collaborate with the Science Library on various other sustainability related projects. One collaboration was for the Science Library to provide a space for his students to host their poster session, a project that had previously always been done in the classroom only. Having the poster session in the Science Library would provide the students with more experience in presenting, while providing the campus as a whole the opportunity to learn from their work. After this session, the student posters would remain in the library on display in an area that was to be dedicated to sustainability.

Plans were also made with a Health and Wellness faculty member for her students to have their food and health poster session in the Science Library. In addition to these poster sessions, librarians hoped to showcase other sustainability related work on campus through other poster sessions and workshops.

Engaging the Community: Promoting and Supporting Sustainability Programming in the Libraries

In order to work towards establishing the Science Library as a Campus Sustainability Hub, the librarians also planned to increase the library’s sustainability-related programming and events. Their goal was to leverage the power of the physical location of the library (centralized, open, and easily accessible to all of the campus community), and the strengths of its librarians, who are accustomed to providing services across departments, in order to plan programming that was appealing, engaging, and accessible for the entire campus community. Below are a few highlighted programming events that the Science Library hosted over the past year that included sustainability in its content. Each of these events helped the library build a bigger sustainability network, create positive associations with sustainability campus-wide, and demonstrate to the campus community that the Science Library is committed to becoming an active Campus Sustainability Hub.
**Virtual Reality & Earth Day 2019**

On Earth Day in the Spring of 2019, the Science Library hosted an Earth Day-themed Virtual Reality (VR) event. The Libraries had recently purchased some VR equipment, including two Vive headsets, TV screens, and computers. The Libraries’ VR Task Force wanted to host more outreach events that exposed the campus community to VR and its educational possibilities. These VR outreach events usually operated as an open house, where students, faculty, or staff could come to the Science Library, select a game or app to play, put on the VR gear, and explore content.

In preparation for the event, a selection of relevant VR apps and games were featured, such as Google Earth VR, which allowed participants to explore any location in the world as if they were there in-person. The event organizers also created a “10 Eco-Friendly Life-Hacks” flyer and a reusable poster that explained the finer details of recycling. Lastly, the event organizers made the conscious decision to serve snacks at the event that included minimal plastic packaging, and would require the least amount of single-use material to consume. Overall, the event was considered a success, with over 25 people attending.

**50 Years of Earth Day Sustainability Panel 2020**

After the success of the 2019 Earth Day Virtual Reality event, the Science Library decided to host a similar event in 2020 with an even stronger sustainability focus in honor of the 50th Anniversary of Earth Day. The event organizers decided to host a panel made up of Binghamton faculty, researchers, staff, and students that would discuss the history of sustainability in higher education. An Earth Day-themed VR open house would then follow the panel, as well as an Earth Day pop-up exhibit curated by the University Libraries’ Special Collections team. The official panel was called, “50 Years of Earth Day: Exploring the Evolution of Sustainability Education since 1970.”

Unfortunately, due to the COVID-19 pandemic, planning for the Earth Day VR event, pop-up exhibit, and panel had to be placed on hold in March 2020. After adjusting to the new virtual working environment, event organizers decided that the Earth Day panel could be transitioned into a virtual setting. All of the original panelists agreed to still participate in the event and planning resumed. In addition, the Special Collections Librarian released a blogpost that highlighted some of the content and materials that was planned for the pop-up exhibit on Earth Day (Special Collections, 2020).

Although there was initial disappointment that the event had to be moved online, this transition did allow for more accessible options that would not have been possible for an in-person event. Attendance to the event was opened up to individuals outside of Binghamton University, and the event information was shared on local and regional listservs. In addition, the session was recorded and archived in Binghamton’s Open Repository, something that would not have been done for the in-person session (Kearney et al., 2020).

Over 50 people attended the event, and the feedback received from attendees was extremely positive. The high level of attendance and the glowing feedback demonstrated that sustainability programming and information is greatly sought-after and appreciated by the Binghamton campus community.
Citizen Science Wikipedia Edit-a-thon

In April 2020, librarians at the Science Library planned to host a “Citizen Science Wikipedia Edit-a-thon” event in celebration of Global Citizen Science Month. However, due to the COVID-19 pandemic, the planning for this event was placed on pause while the potential benefits and drawbacks of making a virtual Wikipedia edit-a-thon were discussed. Wikipedia edit-a-thons often stress the importance of creating an open, comfortable, and interactive environment to support the editors that come to the event. Ambience is an important factor in creating this environment, and edit-a-thons often provide free snacks, refreshments, and music, along with hands-on encouragement and support from the event organizers. Such an environment was planned for the in-person event. However, it was recognized that re-creating this ambience would be much more difficult in a virtual environment, and an online edit-a-thon may not have the same interactive and community feel that makes an in-person edit-a-thon successful. Event organizers decided to research virtual edit-a-thons and were intrigued by how little information they found. Ultimately, the event organizers decided that it would be worthwhile to at least try out an online format as a potential opportunity to experiment and to share their experiences with the rest of the library community.

Promotion for the “Citizen Science Wikipedia Edit-a-thon” was shared on campus listservs, event calendars, and through social media channels. In collaboration with the campus Division of Research, the Edit-a-thon was also included as a featured event during Binghamton University’s Research Days--a week-long celebration in the middle of April at Binghamton University that highlights research for students, faculty, and staff on campus.

One adjustment made to transition the Edit-a-thon online was to shorten the event to two hours rather than five. In order to save time during the event, promotional materials included instructions (see Appendix B) on how participants could create Wikipedia accounts and login to the Edit-a-thon’s dashboard beforehand. A short, 10-15 minute tutorial was planned for the beginning of the event for any attendees that were not able to register and create Wikipedia accounts in advance. The Edit-a-thon’s dashboard was also pre-filled with a variety of science-related articles in need of editing. The topics included citizen science, sustainability, women in the sciences, health sciences, biology, psychology, and more.

On the day of the event, two attendees ended up participating. One of the attendees was a staff member on campus who wanted to learn how to create a Wikipedia account and learn about best practices when editing Wikipedia entries. The second participant was a student, who showed enthusiasm for learning to edit. She stayed for the entirety of the event and edited multiple articles before signing off.

While attendance was not as high as originally hoped, the event was still considered a success, since at least one participant was actively engaged and contributed greatly. Given the experimental nature of this event, and that it was hosted in the midst of the COVID-19 pandemic, the low attendance was expected, and event organizers hope to take lessons they learned from this event and apply them to any future virtual Wikipedia edit-a-thons related to sustainability.

Importance of Collecting in the Sciences Lecture & Exhibition

Every academic year, each library location at Binghamton University creates a themed exhibit that is then promoted campus-wide. The 2019-2020 exhibit theme at the Science Library was “The
Ethics of Collecting in the Sciences.” A biology faculty member, Dr. Anne Clark, reached out to one of the science librarians with feedback on the exhibit in late 2019, and was then asked if she would be interested in giving a presentation on the topic to help supplement the exhibit. Dr. Clark graciously agreed, and the talk was planned for March 2020. Dr. Clark wanted her guest lecture to focus on the importance of collecting and preserving specimens in the sciences, and how the preservation of items from the past can help provide invaluable scientific information about the present. She planned on using examples from her own research on birds, and how preserved bird skins from hundreds of years ago can be studied now to find out important information, such as how climate changes over time have impacted various bird populations. Unfortunately, due to the COVID-19 pandemic, Dr. Clark’s lecture was canceled. However, both the Science Library and Dr. Clark plan to reschedule this lecture at a later date. It is also hoped that Dr. Clark’s lecture will become the first of many similar presentations that the Science Library will host on special topics related to sustainability.

Reaching a Milestone: Acceptance into the 2020 ALA Resilient Communities: Libraries Respond to Climate Change Pilot Program

In September 2020, the authors applied to participate in the ALA’s Resilient Communities: Libraries Respond to Climate Change pilot program, which provides funding and support to “help libraries engage their communities in programs and conversations that address the climate crisis” (Resilient Communities, 2020). In October 2020, the authors were delighted to learn that they had been selected as one of five academic libraries and twenty public libraries to participate in the pilot program. The authors felt that acceptance into this program validated both to themselves and to the Binghamton University community that their diligent work towards creating a Campus Sustainability Hub was truly coming together.

As participants of the Resilient Communities pilot program, Binghamton University Libraries is expected to host three programming events related to climate change, or sustainability between October 2020 and April 2021, one of which must be in partnership with another community organization, and another of which must be a documentary screening from a pre-approved list of films. In addition to the programing, each participating library location is expected to serve as a CREW Climate Resilience Hub, meaning that they will commit to disseminating weather preparedness materials at their library and to host one emergency preparedness-related event a year.

After being accepted into this program, the authors quickly began to finalize plans and confirm collaborations with several community organizations that they had already begun to form during the application process. The authors are currently planning events with the University’s Multicultural Resource Center and the LGBTQ Center, and they are planning events with the Broome County Public Library system as well as a local gardening non-profit called Volunteers Improving Neighborhood Environments (VINES). Many of these collaborations were eagerly sought out to increase climate-related education, resources, and support to populations believed to be underserved both on and off campus, including international students, individuals with food-insecurities, the LGBTQ community, and people of color, many of whom are frequently left out of discussions on sustainability yet are often the most affected by climate change and environmental issues. Below is a list of the forthcoming programming events that the Science Library is now actively organizing:
• A seed-saving workshop series, planned and co-sponsored with a grassroots, garden community organization called Volunteers Improving Neighborhood Environments (VIINES) based out of Binghamton, NY (scheduled for February 2021).

• A virtual screening of the documentary “Fire & Flood: Queer Resistance in the Era of Climate Change,” in collaboration with the LGBTQ Center at Binghamton University (scheduled for April 2021).

• A virtual panel event co-sponsored by the local public library system, Broome County Public Library (BCPL) that will focus on how individuals in the community can take actions, big and small, to live sustainably and help combat climate change (scheduled for March 2021).

• A fundraising and awareness event in collaboration with the Multicultural Resource Center for the campus food pantry. The goal of this event would be to increase awareness of climate change’s impact on food security and help address food insecurity issues that exist for some students on campus (scheduled to run from mid-February to mid-March 2021).

• A climate change and emergency preparedness training for all library staff and faculty that will educate and encourage employees to spread awareness of these important issues at service points, planned with the Libraries’ Emergency Preparedness Committee (scheduled for January/February 2021).

A ONE YEAR REVIEW: REFLECTIONS ON ESTABLISHING A CAMPUS SUSTAINABILITY HUB

After reviewing their past year of progress, the authors feel that they can confidently say they have successfully fostered collaboration, bolstered engagement, and provided active support to sustainability-related education, initiatives, programming, research, and activism taking place within its community. Therefore, they believe that they have accomplished their goal of transforming the Science Library into a Campus Sustainability Hub. The real tipping point of this determination was being selected for the ALA’s Resilient Communities pilot program. Being accepted into this program demonstrated that their hard work in supporting sustainability initiatives on their campus over the past year had translated into meaningful change, and validated their potential to become a sustainability leader in their community.

However, even though the authors feel that their academic library is now a Campus Sustainability Hub, they also recognize that it was not an easy journey, but one fraught with limitations and roadblocks both internal and external. The biggest limitation was the COVID-19 pandemic, which impacted the sustainability-related programming that was planned for the Spring 2020 semester. While most of these events were turned into virtual events, some of them were better suited to this change in format than others, which may have affected the attendance. In addition, several of the plans to alter the physical space of the Science Library to support the Sustainability Hub, such as hanging up research posters, painting nature murals, and creating a sustainability collection and reading nook, also had to be put on hold. Lastly, because of the high prioritization of developing a comprehensive COVID-19 response across the entire university system, including within the libraries, planning for events in the Fall 2020 semester were also severely impacted. Time, energy, and other constraints, such as changes in the academic calendar, made it difficult to advance the objectives for the Campus Sustainability Hub, and so the authors...
ended up utilizing the Fall 2020 semester for planning to prepare for virtual, COVID-19 friendly programming in the Spring.

In addition to the limitations the authors faced due to COVID-19, they also want to acknowledge that it wasn’t always easy to fully conceptualize their end goal for the Campus Sustainability Hub. Due to the fact that this project first came into fruition out of the individual interests of two of the science librarians, what they wanted the Campus Sustainability Hub to be and how they planned on getting there was not rigidly defined from step one. Instead, developing this vision was an organic process, and the Campus Sustainability Hub gradually developed fluidly over a period of time as each new collaboration was formed or a new event was planned, until the librarians were able to fully formulate their official definition of the concept and outline concretely how they planned to evaluate their progress.

Despite these limitations, the authors are proud of their ability to transform their Science Library branch into a Campus Sustainability Hub. They do recognize, however, that this is just beginning to scratch the surface of what they can offer, and that there is still a long road ahead of them to get it operating at its full potential. In order to continue to strengthen and sustain this endeavor, the librarians created an action plan that outlines each of the areas they hope to develop over the next year.

**MOVING FORWARD: AN ACTION PLAN FOR STRENGTHENING AND SUSTAINING THE CAMPUS SUSTAINABILITY HUB**

Feeling boosted by their acceptance into ALA’s Resilient Communities pilot program, the authors also decided to apply for ALA’s Carnegie-Whitney Grant, which provides funding and support for libraries of all types to create unique resource guides. They have proposed creating a new resource guide that will expose, educate, encourage, and envelop all individuals that seek to learn about the environment, climate change, and sustainability through a social justice lens. If they receive the grant, it will greatly support their mission to strengthen the influence and resources of their Campus Sustainability Hub.

However, even if the grant is received, there is still a lot of work ahead to ensure that the Science Library continues to grow and sustain their newly founded Hub. The authors have identified four aspirations that they will continue to work towards over the course of the next year in order to strengthen this project and to enhance a campus-wide sustainability culture. They arrived at these four aspirations by referencing the library literature, and by identifying gaps in sustainability services specific to their campus community.

**Sustainability from Within: Formalizing a Commitment to Sustainable Practices and Policies within the Libraries**

All of the sustainability collaborations and programming so far accomplished in the Science Library have been undertaken by individuals working, both independently and together, in an unofficial capacity. In order to grow the library’s influence and ability to dedicate time and resources to growing and sustaining the Hub, an official commitment on behalf of the entire
University Libraries system should be formalized. Jankowska et al. (2013) stated in their study that measured the level of engagement of academic librarians in sustainability noted that there is, “a gap between the eagerness to be actively engaged in sustainability activities and an absence of specific sustainability documents such as a statement, commitment, or action plan in the strategic plans of academic libraries” (p. 53). To avoid this disconnect within their own library system, the authors plan to work towards realizing the actions below within the next year:

- A creation of a formalized sustainability commitment from the Binghamton University Libraries.
- The creation of a sustainability committee or task force that is dedicated to taking actions to increase sustainability programming and outreach by the University Libraries, that also advocates for greener practices within all the library locations.

**Greening the Campus: Advocating for Sustainability-Focused Initiatives and the Cultivation of a Sustainability Culture**

While the Science Library has thus far been focused on sustainability-related programming and collaborations, there is a strong interest in influencing the broader campus community. Those involved in the library’s sustainability work believe that more campus-wide sustainability initiatives should be made central to the university’s mission, and that a “culture” of sustainability should be promoted. Using AASHE’s Campus Sustainability Index (2020) as a reference for what types of sustainability-related services Binghamton can improve upon (for instance, the Binghamton Campus only scored 2.09/8 for the category of food & dining), the authors hope to use the Campus Sustainability Hub as a way to advocate for change and improvements to help make Binghamton University a more sustainable campus overall. Some potential actions currently identified that can be advocated for to help foster this sustainability culture are:

- Discounts on all drinks at University cafes and restaurants when reusable mugs are used.
- The creation of more charging stations for electric cars.
- Promotion of a more rigorous recycling program that includes “recycling centers,” labeled bins, and recycling workshops.
- More widespread composting options for the entire campus.

**Community Involvement: Strengthening Collaborations with Local Organizations & Increasing Environmental Justice Programming**

While there are already strong collaborations established with faculty, students, and organizations both on and off campus, the authors believe that it is imperative to continue to sustain and build upon these partnerships long into the future. Two areas of growth that the authors would specifically like to focus on over the next year are 1) creating more partnerships with student organizations on campus and 2) creating more sustainability programming that is focused on issues of environmental and climate justice. Below are a couple of actionable items that the authors would like to pursue:

- Planning a panel discussion that focuses on the intersections of systemic racism, climate change, and the environment.
- Creating a more permanent workshop series or discussion group that highlights issues related to environmental justice.
• Reaching out to several student organizations on campus that may be interested in partnering in environmental justice programming, such as the Binghamton Food Co-op, the Black Student Union, the Latin American Student Union, the Diverse Cultural XCellence Club, and more.

Sustainability Information for All: Increasing the Visibility and Accessibility of Sustainability Information and Resources

In order to increase the influence of the Campus Sustainability Hub, it is necessary to continue to create, grow, promote, and disseminate sustainability-related resources that educate and inspire the campus community to action. Therefore, it is a goal that the Campus Sustainability Hub will provide fuller, more comprehensive, and interactive access to various sustainability-related resources, both in the physical space and in the online environment. Below are several ideas that are already being planned or considered to highlight sustainability resources:

• Creating interactive exhibits that focus on issues related to sustainability. Partnering with students and/or faculty to create these exhibits is also a possibility.
• Creating a Sustainability Libguide that includes resources to support several sustainability-related endeavors and interests, such as research, education, teaching, activism, volunteering, campus involvement, etc.
• Curating a sustainability book collection that is centrally located in the Science Library.
• Creating a permanent, physical sustainability “center” in the Science Library that would include painted murals, book displays, featured exhibits, and physical resources.

CONCLUSION

Libraries, whether public or academic, often already have several powerful tools embedded into their service models that make them well-suited to become centers that support and promote sustainability within their communities. Libraries are frequently easily accessible, interdisciplinary in scope, community-centered, and providers of important resources and information. In the article “Ready for Action” from the ALA magazine American Libraries, Rebekkah Smith Aldrich, executive director of the Mid-Hudson Library System of Poughkeepsie, New York, states that writing a climate action plan for libraries “is not something that is nice to do but rather critically necessary” (Lawton, 2020). It is of the opinion of the authors of this study that this sentiment expressed by Aldrich can and should be applied to incorporating sustainability into all aspects of libraries and librarianship, from monitoring energy output to educating communities about sustainable practices.

The authors’ hope is that this paper can also be seen as a call to action, and that sharing their experiences of turning their library into a Campus Sustainability Hub can be used as inspiration and guidance for all kinds of libraries across the world to work towards this same goal.

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Appendix A: Science Library Meeting Room Policy

Introduction:

This policy outlines the rules and requirements for the reservation of the Science Library’s meeting room (G12) by Binghamton staff, faculty, or student organizations. Continued use of the room is contingent upon the observance of the policies outlined below. Fees may be assessed to cover any damages, clean-up, or losses incurred.

Scope:

Any Binghamton staff member, faculty member, or student organization actively collaborating with the libraries may request to reserve the Science Library’s Meeting Room to host meetings, events, or programming that are academic/educational in nature. For more information on how to collaborate with the libraries, please email the Libraries Administration Office at libadmin@binghamton.edu.

Room Reservations:

Reservation requests will be assessed on a first-come, first-serve basis. Availability of the meeting room will vary depending on the event type, event needs, and/or the time or date of the event. In order to request the room or inquire about room availability, please contact the Science Library at sciencelibrary@binghamton.edu.
Cancellations or Changes to Reservations:

If an event must be cancelled or rescheduled, the event host must notify the Science Library at least 24 hours before the event was originally scheduled by phone (607-777-2166) or by email (sciencelibrary@binghamton.edu).

Library Collaboration:

The use of the meeting room does not signify endorsement by the University Libraries for any of the content, events, programming, or organizations that take place. Any promotional materials that are made for events or meetings hosted in this space must only use the Libraries’ name to signify the location of the meeting unless other arrangements have been made.

Guidelines for the Use of the Meeting Room:

1. For safety and security purposes, the room windows & doors may not be covered or blocked during use.
2. No smoking, vaping, alcoholic drinking, or use of tobacco products/ tobacco-alternative products is allowed in the room at any time.
3. Users must abide by the [campus food policy](#) when ordering food for events. Users are responsible for all food set-up and clean-up, including ordering additional trash receptacles when they are needed. Users are requested to inform the Science Library if they do plan on having food at an event/organization meeting.
4. Users cannot use appliances, heating or cooling devices within the room.
5. Users will be expected to show consideration by straightening the room after use, keeping the space tidy, and placing any leftover waste in the proper trash receptacles.
6. Users cannot remove furniture, equipment, or materials from the room.
7. Users are expected to be respectful of other library users outside of the meeting room, including refraining from excessive loudness. Any meetings/events hosted in the room must not disturb normal library operations, and the library reserves the right to end any functions/meetings that are creating large disturbances or pose health and safety risks to others within the library.
8. Users are responsible for their personal property at all times and should never leave personal belongings unattended. The Libraries are not liable for loss or damage to any personal property.
9. Users of the room will be held responsible for any damage, theft, or loss of the room’s furnishings or equipment that occurred during its use during meetings, events, or programming.
10. Users agree to occupy and vacate the room at the agreed-upon times.
**Room Use Contract:**

Group Name: ________________________________

Date & Time of Room Use: __________________________

Approx. Number of People Expected to Attend: _________________

Will food be served at this event? __________________

**The person(s) signing the following contract act as the representative for all attendees of any meeting/event that takes place in the Science Library Meeting room, and will be held responsible for any violations of the room use policy & guidelines that occur during the use of the room by the group/organization.**

Signature of Event Host / Club Organizer: __________________________   Date: _________

Full Name (In Print) ________________________________

Second Signature (if applicable): _______________________ Date:_____________________

Full Name (In Print): __________________________________

**Appendix B: Binghamton University Libraries’ Virtual Citizen Science Wikipedia Edit-a-thon Sign-up Instructions**

**Step 1: Creating Wikipedia Account**

1. Go to https://www.wikipedia.org/.

2. Choose English.

3. If you don’t have a Wikipedia account, click “Create account,” or if you already have an account, click “Log in” (top/right corner).

4. Create username and password.

**Step 2: Dashboard Sign Up and Log In**

1. Go to https://bit.ly/CitSciBing.

2. Click “Log In with Wikipedia” (if you’re not automatically logged in, enter your username and password).

3. Read pop-up message and click “Allow.”

4. Click “Join” (bottom/right corner).
About the authors

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