"Spring 2023 Sustainability Grant Proposal"

24 Hour Room/Hutch Café Sustainable Space Improvements

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Total funds requested: \$4000

Project Summary:

One time energy efficient lighting/temperature improvements and sustainably procured furniture updates to the 24-hour room/Hutchinson café.

Goals:

To make energy efficient and resource conscious improvements to the 24-hour room/Hutchinson Café space attached to the library based on student feedback while maintaining the building's past principles of sustainability.

Our improvements to space will be through procuring materials that are post-consumer recycled, adding green plants for student interactions, and adding energy efficient blinds and LED lights to improve the space's energy efficiency and temperature regulation.

This space is used for 24-hour study space and is centrally located at the heart of campus, these one-time improvements will positively impact student learning experience on campus. This project will address Stars certification OP: 11 Sustainable Procurement, AC: 08 Campus as Living Laboratory, and most relevantly: OC: 05 Building Energy Efficiency.

Project justification:

Throughout the last year we have gathered feedback from our own student worker team, meetings with Student Government Association, and distributed a survey in December 2022. Specific assistance and brainstorming given by the library student Peer Reference Assistants team: Gage Root, Lauren Miller, and Jared Grossman.

Some of the comments in an open-ended portion of survey about the 24-hour room included:

- "Update couches, 24-hour room typically cold and uncomfortable to stay in..."
- "More comfy chairs and couches"
- "Could use curtains in the hutch; it gets hot when you're working on computers because of the amount of sun"
- "24-hour room is cold and sad"
- "The lighting in the 24-hour room is very dim, especially when doing physical work not on a screen. The option to turn on more lights would be nice"
- "It would be nice for the furniture to be updated"
- "The 24-hour room is usually cold, has harsh lighting, and uncomfortable seating options"

Most students focused on the lack of comfort, lighting, and heat issues in the space. This space should be a welcoming and pleasant place for students to study, use computers, and work on projects. This space is open after the library closes and after most other academic spaces close for the day. These responses inspired us here at the library to think of how we could make improvements to the space to address heating, lighting and comfort in the most sustainable ways possible.

In our discussions with our student worker team and multiple meetings with SGA representatives we heard the general sense that although students are interested in the concept of a 24-hour study location, they find the current one unacceptable and uncomfortable and therefor do not use the space.

This negatively impacts student success and is a main goal of the library team this year to revise the space to better meet student needs.

Methods:

- Insulating honeycomb blinds to effect temperature regulation and light access to space
 - Installing these blinds will be one of the most impactful changes to address the many issues a space that is windows on three sides has presented to student comfort and energy efficiency in the space.
 - Steve Carrick, Director of Facilities, has agreed to this project—see supporting documentation
- LED lights to replace current lights to effect electricity output with overhead lights
 - The lighting changes will make a huge difference in our electricity consumption and will add to a more welcoming atmosphere for students. We are aiming for soft white lights instead of what most students refer to as the "dim, cold, or sad lights"
 - Steve Carrick, Director of Facilities, has agreed to this project—see supporting documentation
- Rugs from two companies with sustainable procurement of post-consumer recycled practices:
 Hook & Loom and Fab Habitat
 - Our nine student workers in the library and four library staff members voted on rug design options
- Plants to create a living learning environment, bought locally at Hhott House & wall art from a company out of Germany that makes sustainable living moss wall art.
 - We would like to have this space to be as interactive for students as possible. We will
 have small whiteboards out with markers to state when the plants were last watered, a
 water pitcher, and each plant's care instructions.
 - In this model students using the space are welcome to take a break to water the plants or learn more about a specific plant species.
 - We have a rough outline of 6 plants in medium sized pots planned for this space, but would like to discuss with the Sustainability team to see if they have recommendations for specific plant types indigenous to the area or that they would recommend for a space like the 24-hour room—high light, doors that open often throughout the day, all seasons, etc.
 - We buy the many plants housed in the library and the supplies needed to maintain them from the Hhott House currently and are confident they will be able to help us make this vision a reality and give us good guidance as to care instructions. We have some existing planters we can use in library storage as well if needed.

Project Budget and Timeline

Budget table:

Item	addresses	details	amount	cost/item	Total cost
Blinds	Heat and lighting, OC: 05 Building Energy Efficiency	10 windows measuring 47 % " width and 70" height	10 large blinds 4 small blinds	LG-\$1,532.30 SM-\$472.76	\$2,011.05
		measuring 47 ¼" width and 36" height			
LED lights	Lighting, OC: 05 Building Energy Efficiency	LED overheads	Case of 25 T8 tubes	\$5.76 ea	\$144.08
Rugs	Comfort and heat, OP: 11 Sustainable Procurement	Hook & Loom recycled fabric fibers eco- cotton Fab Habitat recycled	3 oval 6x9 ft woven green rugs 2 rectangle 8x10 ft leaf	Ovals \$228.00 ea Rectangles	\$1,023.98
Plants	Comfort, OP: 11 Sustainable Procurement & AC: 08 Campus as Living Laboratory	plastic 6 medium sized house plants from Hhott House	design rugs 6 plants and planters	\$169.98 ea Waiting response from Lou Reuter for exact cost— we plan on spending no more than \$250.00	\$502.57
		1 wall art living moss PSC sign	3 letters in Reindeer Moss	3 letters \$54.99 ea + shipping (252.57 total)	
Total cost					\$3,681.68

Budget Justification and Project timeline:

Summer 2023 to change out the lighting and install the blinds as approved by facilities team (see supporting documentation). To align with that goal, we will order the rugs and plants in June 2023. There are some improvements we will make to the space that are unrelated to this grant that will need

to be done over the Summer as well (furniture moves and electrical outlet replacements), therefor this time fits our overall project goal.

In addition to the goals related to this sustainability grant, we will be rearranging furniture currently based in storage, adding a wheeled large TV monitor w/ HDMI hookup from library inventory for multimedia display in the space, moving the printer next to the computers, and adding a large compost container from Blue Line Compost/College Bookstore.

Lastly, we met with campus leaders who have obtained a grant for a healthy food vending machine through the Heart Healthy New York non-profit based in Saranac Lake. We strongly suggested they place that machine in the 24-hour room. The vending machine location at the 24-hour room was accepted by HHNY and is planned for installation for the Fall 2023 semester.

Supporting Documentation

<u>Letter of support from Steven Carrick, Director of Facilites:</u>

Verbal confirmation given to Library Director on 3/6/2023, Steve has had a very busy week and is sending us the written version ASAP. We will attach in an email as soon as we receive it.

Background literature:

- Alexander Pichlhöfer, Eldira Sesto, Jutta Hollands, & Azra Korjenic. (2021). Health-Related Benefits of Different Indoor Plant Species in a School Setting. *Sustainability*, *13*(9566), 9566. https://doi.org/10.3390/su13179566
- Boyd, F. (2022). Between the Library and Lectures: How Can Nature Be Integrated Into University Infrastructure to Improve Students' Mental Health. *Frontiers in Psychology*, *13*, 1–14. https://doi.org/10.3389/fpsyg.2022.865422
- Fitton, R., Swan, W., Hughes, T., & Benjaber, M. (2017). The thermal performance of window coverings in a whole house test facility with single-glazed sash windows. *Energy Efficiency*, *10*(6), 1419-1431. https://doi.org/10.1007/s12053-017-9529-0
- Kavathekar, A. A. K., & Bantanur, S. (2022). Study of the Influence of Indoor Plants as an Indicator of Biophilic Design on CO2 Concentrations in a Classroom of Higher Education Institute. *Journal of Sustainable Architecture & Civil Engineering*, 31(2), 96–108. https://doi.org/10.5755/j01.sace.31.2.30791
- Martig, S. M. (2017). Meeting energy codes with efficient lighting systems: LEDs help achieve high quality or reduced lighting levels within the design to meet energy codes. *Consulting Specifying Engineer*, *54*(10), 34.
- McGee, B., & Nam-Kyu Park. (2021). Beyond Plants: Biophilic Design as a Pedagogical Tool. *International Journal of Design Education*, *15*(2), 209–228. https://doi.org/10.18848/2325-128X/CGP/v15i02/209-228
- Michael, M., & Overend, M. (2022). Challenges and Opportunities of using Closed Cavity Façade (CCF) for Improving Energy Efficiency and Indoor Environmental Quality (IEQ) in Office Buildings in US Climates. *ASHRAE Transactions*, *128*(1), 383–392.

Blinds estimate price:

blindsgalore-quote.pdf

LED lights estimated price:

https://www.1000bulbs.com/product/211105/PLT-90011.html

About recycling practices for the two different rug sources:

https://hookandloom.com/eco/

https://fabhabitat.com/our-materials

Rugs estimate price:

https://hookandloom.com/product/springfield-eco-cotton-braided-rug-copy-2/?attribute_pa_dimensions=6x9

https://fabhabitat.com/wc-mn-gr-69.html#

Plants estimated price:

Moss Letters and Symbols: Creative Wall Art | Forest Homes (foresthomesstore.com)