

STUDENT SUSTAINABILITY COMMITTEE

Semesterly Report

Thank you for your commitment to green initiatives at the University of Illinois. One of the ongoing requirements listed in the terms of the funding agreement for your project is the submission of semesterly reports with key information about your project. In addition to this form, please provide additional financial documentation and/or progress photos if available.

Please be as accurate as possible in describing the project (including possible setbacks or challenges in meeting the initial goals of the project). Not fully meeting your project's goals will not disqualify you from making future funding requests as long as your reports are as complete and accurate as possible. If you have any questions, please contact Micah Kenfield, Program Advisor for the Student Sustainability Committee, at <u>kenfield@illinois.edu</u>.

Project Name: Ilini Gadget Garage: Education through Electronic Product Life Extension

Date of Report Submission: 1/12/2017

Project Purpose:

ISTC proposed to launch a center where UI students and staff could bring their personal electronic devices for assistance with assessment and repair. We call this center the Illini Gadget Garage (hereafter referred to as "Gadget Garage" or "Garage"). Using the same "collaborative repair" model employed at the campus bike shop and MakerSpace Urbana (http://makerspaceurbana.org/projects/computer-help-desk/), clients with devices in need of repair/ troubleshooting work together with Gadget Garage student staff and volunteers to perform the necessary device assessment and maintenance activities. Depending upon the situation, activities might range from guidance on how to make your computer/device run faster to actual repair and replacement of components.

Desired outcomes for students, staff, and the community include:

1. Hands on experiences for UI students, not only in terms of performing repairs, but also in process documentation and fostering sustainable behavior on a larger scale through the iFixit Technical Writing Project; marketing and business operations; lessons in industrial design for repair and recyclability; and in environmental education and communication.

2. Increased awareness of electronics laws and recycling options.

3. Increased awareness of sustainability issues surrounding electronic products throughout their lifecycles.

4. Decreased misconceptions regarding the disposability of devices and prohibitive complexity of electronics repair and maintenance.

5. Contribution to the overall efforts to make ours a more sustainable campus with a reduced carbon footprint.

Detailed Accounting of Expenditures to Date:

To date, a total of \$70,103.09 of the grant money have been spent. A separate report is being submitted for the supplementary \$10,000 grant from SSC to put toward ADA compliance renovations for the Gadget Garage's physical location; however, as noted in that grant proposal, and previous progress reports for this original grant, the work for ADA renovations was estimated at over \$32,000, and thus that \$10,000 was to be pooled with space-related line items from the original grant as well as some matching funds from related ISTC accounts. Therefore, it is necessary to touch upon renovation expenses in this report as well. A copy of the most recent account statement for this original grant is attached separately; it shows a balance remaining of \$24,896.91 and among the listed charges is highlighted \$17,821.48 related to ADA compliance work. Also attached separately are copies of two renovation estimates received from UI Facilities & Services (representing a total estimate of \$44,852.50; this is higher than the original estimate because of changing concrete prices, greater thoroughness, and contingencies included). Further, vouchers for UI F&S work orders placed by ISTC for the months of July and August are separately attached; note that these documents include some work orders unrelated to this project; highlighted sections deal with ADA compliance expenses for the Gadget Garage project. Comments on the August voucher show how ADA-related renovations were covered by the \$10,000 supplemental grant (referred to as "ADA GG"), the original SSC grant (referred to as "IL GG") and other ISTC funds (referred to as "200250-807SEI"). Those work orders relevant to ADA work show highlighting. Taken together, the vouchers reflect actual charges for ADA compliance work (from all funds) totaling \$37,504.52 (below the estimated amounts). Briefly, ADA compliance renovations included pouring an accessible parking space on the east side of the building, pouring a sidewalk from that space to an existing sidewalk with a curb cut on Oak street, pouring a sidewalk from the accessible space to the new entry on the north side of the building, installing a new door on the north side of the building with an accessible handle and appropriate slope for entry via wheelchair, installing LED lights on the exterior of the building to illuminate the new parking space, and installing power and data pendants from the ceiling in the center of the workspace to provide adequate numbers of wheelchair-accessible workspaces (outlets along the walls were coupled with existing lab countertops too high for individuals in wheelchairs).

Other space-related contractual expenses incurred since the last progress report have included:

- safety-related expenses (assessment of the existing fume hood and purchase of an alternative, bench-top smoke absorber adequate to handle any soldering-related fumes rather than extensive repairs to bring the fume hood up to code)
- Fabrication and hanging of "Illini Gadget Garage" signs on the north and south sides of the building to assist patrons in locating the appropriate space
- Maintenance (e.g. building service workers, utilities, repairs to air conditioning, replacement of light bulbs, etc.)
- Interior improvements to create a more useful welcoming space (e.g. cleaners and paint for the walls)

Non-space related expenses have included:

- Personnel expenses (e.g. salary for graduate student hourly)
- Various tools and repair equipment (e.g. a heat gun, special adhesive tape for attaching cell phone screens, a Dremel rotary tool, a cordless drill and bits, a precision drill and bits, screwdrivers, canless air for cleaning dust out of electronics, specialized tools for opening small electronics, etc.)
- Marketing materials and other daily "office" or event related consumables (e.g. toner for the printer; a project poster for use at outreach events; literature holders for fact sheets and handouts; refreshments and paper plates for events held at the space; card stock and large format paper for printing informational posters for the space, bookmarks with hours and other information, flyers; device cables; sign holders; etc.)
- Materials for off-site events (pop-up clinics) (e.g. a rolling case to carry tools, handouts, and a laptop)
- A locked donation collection box for the physical location (and future pop-ups where appropriate).

During the spring 2017 semester, the bulk of the balance left in this original SSC grant will go toward salaries for student hourlies hired to facilitate expanded open hours at the physical location, regular pop-up clinics, greater outreach and marketing, and workshops that will allow for revenue generation to support the project after this seed funding has been exhausted (more on this below).

Project Progress to Date:

Summer 2016: New Web Site, Business Plan, and Renovation

In June of 2016, a new web presence for the Illini Gadget Garage project was established, separate from the project page on the Sustainable Electronics Initiative (SEI) web site. This was both to make it easier for interested parties to find project information, and also to make it easier for student staff and volunteers to assist the project coordinator (Joy Scrogum) in creating and maintaining content for the site. The new site is based on WordPress, and runs on a private version that ISTC hosts on one of its servers (i.e. not on WordPress.com). This move also would make it easier for remaining ISTC staff (both Joy and ISTC/Prairie Research Institute IT support) to maintain the site moving forward, since due to cuts associated with the state's budget crisis, ISTC knew that it would be losing its web developer by the fall. ISTC uses WordPress for multiple other project blogs; this will thus continue to be supported by Institute IT indefinitely. The current SEI web site is based on ColdFusion. The ISTC web developer was proficient in that programming language, but remaining IT staff are not, and our version of WordPress is easy to maintain with regular updates from WordPress.com. By moving to WordPress, the Gadget Garage site would have a more stable future. Working with ISTC's private version, which is more secure than having a site on WordPress.com, but with access to the plethora of templates available to WordPress.com users, the site will also enjoy more flexible future development options than might be available from the publish.illinois.edu

service. That service is also WordPress-based, but had only three templates offered at the time this decision was made, and it seemed that having the site remain on the ISTC server would allow greater control for the near future. The template chosen for the Gadget Garage site is responsive. ISTC's web developer also advised that the University as a whole is looking to host its own version of WordPress for the campus sometime in the future (akin to what ISTC is currently doing), and if that comes to pass, the Gadget Garage site would be well suited to move over, at that time, to a non-ISTC server, if desired. At the time of the writing of this progress report, the new Gadget Garage site is still in its infancy, with more content and improvements needed. With the hiring of additional student hourlies for spring 2017 (discussed below), site development will be a priority in the spring semester.

Also in June, Joy Scrogum taught a science class on impacts of electronics at the Natural Discovery Day Camp at the Montessori School of Champaign-Urbana. The importance of repair and product life extension rather than replacement was discussed among other topics, and information about the Illini Gadget Garage was included in handouts the students were given to take home and share with their parents.

Madeleine Hall (graduate student from GSLIS, which is now known as the iSchool) continued to work as an hourly on the project, holding open hours at the physical location (INHS Storage Building 3) and working on project marketing (e.g. investigating whether we could participate in Quad Day and other events, reaching out to student and community groups, writing posts for the new WordPress site, compiling information for potential sponsors, helping with social media, flyers, etc.). She also met regularly with Joy Scrogum and Kinyetta Nance, an iSchool graduate assistant working under the supervision of Martin Wolske (but not paid under the SSC grant for the Gadget Garage) to discuss ideas for the business model for the project. Kinyetta has an entrepreneurial background, having started her own business in the past, so her she could add her personal expertise to the groundwork laid by students in William Bullock's class in Fall 2015 (discussed in previous progress reports). Madeleine and Joy were able to provide background and contextual project information for Kinyetta, convey issues discussed in project team meetings related to business planning, and provide feedback on Kinyetta's drafts. Kinyetta completed a final draft business plan for the project in July; her Word document, presentation slides, and conceptual documents used during development of the plan are available at https://drive.google.com/drive/folders/0B- t-1jMQ24dUFBFeVM4dTk3ZIE. A Sustainable Electronics Initiative Campus Consortium meeting was held at ISTC on July 18 at ISTC for presentation of Kinyetta's plan for feedback. This meeting was sparsely attended (less than 10 people came). The project coordinator noted that there seemed to be some confusion related to the proposed membership fee structure (note that "regular" member in Kinyetta's document should be changed to "non-student" for greater clarity) and the difference between the usage fee and a membership. The intent had been that anyone could come in a pay a "usage fee," which would then include a 1-month membership, allowing the individual to come in at any time for additional assistance for the remainder of the month without paying an additional usage fee. This might incentivize people to come in for follow-up assistance on a device (e.g. after a necessary part was obtained on their own, such as a new cell phone camera, they might come back in to use tools and staff guidance to install the replacement camera without an

additional fee). People might also be more willing to bring in other devices for troubleshooting before the end of the month (e.g. perhaps they came in for a laptop issue, but upon having successfully dealt with that, they might consider coming in with a cracked cellphone screen during their "free" month). The intention was to encourage greater participation in the extension of useful life of more products, and make some use of psychology—rather than saying we offer 1-month memberships, or more expensive annual memberships, having a relatively inexpensive "usage fee" with a "free" 1-month membership might make someone feel fairly positive if they only brought in 1 or 2 items over the course of a month in a given semester. If they paid a higher amount of money to come in at any time during the year, and then never ended up coming in, or came in fewer times than they thought they might, the membership price paid might seem less worthwhile to them. However, if a person just needed limited troubleshooting assistance and had no other need for repair assistance during the course of a semester, they could come in once, pay the modest \$10 fee, and then feel ok about not taking advantage of the "free" 1-month membership.

At the time of writing of this report, no membership or fees are currently in place, in part because the project coordinator is still working with Prairie Research Institute staff to establish a self-supporting fund for the project (more on that below), into which membership fees, workshop registration fees, and other revenue may be deposited. Additionally, the project team, conferring with Prairie Research Institute accountants on the draft business plan, felt that for the time being, services should remain free to allow the community to become more familiar with the project and more enthusiastic about it. Delays due to renovations and other issues mean that awareness of the project is still in early stages. Fees will not be introduced for regular services before the later part of spring 2017 in order to allow familiarity and understanding of the project to grow. When and if fees become necessary (i.e. if other grants or sponsorships are not obtained to cover all costs), then it is likely that they will be modest "service fees" for each visit or that there will be more straightforward membership fees for set periods of time, to avoid the confusion associated with the "usage fee/membership" format.

The physical location was closed for ADA renovation beginning July 11. (See the section on expenses above, and the separate report on the supplement \$10,000 grant for renovation for further details.)

<u>Two pop-up clinics were held at ISTC</u>. One was held in conjunction with the aforementioned Sustainable Electronics Campus Consortium meeting on July 18. While it was marketed to Prairie Research Institute staff and members of the consortium, no one brought in devices; rather the pop-up provided an opportunity to raise awareness of the project and services offered. Similarly, the other ISTC pop-up, held on July 11th, was promoted to the Institute staff and others (via web sites and social media), but was sparsely attended and essentially served to raise awareness of the project. People came and asked if we could assist with devices they owned, but did not have with them, and they left asserting plans to stop by the physical location at some point.

Fall 2016

ADA renovations were completed by the end of August 2016, and interior improvements were undertaken at that time to make the space both more functional and welcoming. Per ISTC's agreement with the Illinois Natural History Survey (INHS), ISTC is allowed to use INHS Storage Building 3 for the Illini Gadget Garage project paying a portion of the utilities for the space, and paying for renovation and repairs upon prior approval by INHS. The space had been previously occupied by a retired researcher, who was to have been moved out of the space shortly after ISTC began use in the fall of 2015. However, little progress on that move had been made by the end of summer 2016. Joy Scrogum worked with the INHS director, ISTC director, and Institute facilities director to ensure the space was fully available for Illini Gadget Garage use by November 2016. Interior improvements worked on by project staff and volunteers included cleaning, painting, minor repairs, moving out of unnecessary furniture and equipment and moving in other items (such as an unused couch from ISTC for the "lobby" of the Gadget Garage space). The space was arranged so that educational materials (posters, handouts, etc.), the donated microwave and coffeemaker for staff and patron use, a mini frig, a couch, and table for refreshments (for events and future workshops) were arranged in the "lobby" just within the new door. The "lobby" also includes receptacles for collection of unwanted CDs and DVDs and single use batteries. Our battery bucket is currently the only option available on campus for recycling single-use batteries. (Note that the collection bucket was obtained late in the semester using donated funds, not SSC grant funds and the CD/DVD collection will also be supported by donated funds; widespread marketing of these programs will take place in spring 2017). Within the workspace, an "intake" counter was set up where patrons could sign in, fill out a waiver, take other handouts, and deposit a donation in our donation box if desired. ISTC IT support staff assisted with setting up computers destined for Surplus for use within the workspace.

Madeleine continued as a student hourly employee working on daily operations for the project. Open hours in fall 2016 were Tuesdays and Thursdays from 10 AM to 1 PM and Wednesdays from noon until 3PM. In addition to standard hours, the possibility of having a pop-up clinic booth during Quad Day was explored; however, a misunderstanding by Illini Union staff meant that they at first thought this project was an RSO. When they finally understood the true nature of the project, they suggested that the Gadget Garage get an RSO or the SSC to sign up for a booth on their behalf, but this was not something that could be arranged given the short timing prior to Quad Day at that point, and the fact that such an arrangement with SSC was irregular, rather than something that had been done previously, as suggested by Union coordinators. So a presence at Quad Day was not achieved. Opportunities for other pop-ups were explored, including communication with the Sustainability and Innovation Living-Learning Communities and the University YWCA. Madeleine and Joy also met with a representative of the Undergraduate Library Media Commons to discuss the project and possible collaborations. This service allows students to check out various types of tech (e.g. digital cameras, video recorders, etc.), and Media Commons staff often receive inquiries about how to maintain or repair devices. It was agreed that future pop-up clinics and workshops would be held in the Media Commons space. Scheduling of pop-ups for these locations is planned for spring 2017.

Events outside standard open hours where repair and troubleshooting assistance was offered as part of broader outreach included:

- <u>Campus Sustainability Celebration on October 26</u>. We received a lot of positive comments at this event. Madeleine made such a positive impression on an attendee, that when he learned he had won a raffled shirt, he asked Morgan Johnston to give it to the "librarian" he spoke with at the Gadget Garage table who gave a very professional pitch in his opinion. Many attendees expressed interest in coming into the space and the need for such a service.
- <u>Illini Gadget Garage Grand Opening/Open House, November 12</u>. (see also <u>https://www.facebook.com/events/1004359193043972/</u>). Five people registered to come in for assistance, filling out the event's diagnostic form ahead of time. Surprisingly none of these individuals showed up at the event. Roughly 5-6 other individuals stopped by to ask questions about the project, the types of devices we could service, and how to properly recycle unwanted electronics; none of those drop-in had a device for assessment with them. Follow-up with the five registrants led to rescheduled appointments; at least one individual rescheduled her appointment multiple times over the remainder of the semester, but she did not ultimately come in.
- <u>America Recycles Day Celebration, Anita Purves Nature Center, Urbana, November 19</u>. Four people registered for one-on-one time. Three of these were communicated with prior to the event and received advice or guidance which meant they no longer needed one-on-one time at the event. The fourth person brought in a CD player and received advice on how to clean it out to make it function properly again (the owner successfully repaired it by doing this at home after the event). We interacted with several families with kids at this event (uncounted) as we also brought along recycled computer key beads for bracelet stringing; while the kids worked on their craft we spoke to parents, answered questions, and distributed handouts.
- <u>Recycled Holiday Crafting Event, December 3</u> (see also <u>https://www.facebook.com/events/890799887724217/</u>). This was intended mainly as a way to draw in people who might be intimidated by repair or who might be interested in learning more but not have an item in need of repair currently, though folks could bring in devices if they wished. Seven people came, including a man with his young son who had read about the event on Chamabana Mom's web site (Madeleine had sent out information about the upcoming event and they featured it). We received a positive Facebook review and some small cash donations in our donation box as the result of this event.
- <u>iPhone Tear Down Demo, December 17</u>. Madeleine decided to turn the repair of her own phone into an opportunity for others to learn more about the project. Given the timing relative to finals, the event was not expected to be well attended. But one person did come and worked with Madeleine on an issue with his own cell phone. He had purchased an iFixit repair kit specific to the task beforehand (because the whole kit was cheaper than buying the part he needed on its own); he graciously donated the tools from that kit to us after completing his repair.

All told, since our last progress report, we have completed troubleshooting and repair sessions that resulted in the extended life/diversion from disposal of 87.9 lbs. of electronics (based on weights of devices brought to us). These electronics included multiple cellphones, two different CD players, a television, a hot plate/stirrer, and an iPad Mini. In some instances repair required multiple sessions with a patron, whereas in other instances communication ahead of time meant results could be reached in one session. In other cases, troubleshooting identified the potential problem and advice was provided on how the individual might obtain necessary parts through local businesses or the Internet, or the issue was one that could not be resolved. When necessary, patrons were provided with information on local recycling opportunities, if their continued efforts beyond their time at the Gadget Garage proved unsuccessful. In our last report, we stated that 21.5 lbs. of electronics were successfully repaired; so a grand total of 109.4 lbs. of devices have been repaired or properly recycled as the result of this project thus far. This does not include successes of which we are unaware because our only interaction with a patron was via email or Facebook message inquiry. For example, we received an inquiry about a damaged cuckoo clock during the fall semester, and provide several resources via email on how to obtain replacement parts, as well as information on a clock repair option in Urbana. Since we never saw the device and did not hear back, we do not have a weight to include in our diversion statistics and cannot know if repairs have been implemented successfully. We have also had questions that were strictly related to where and how to properly recycle electronics in the area, and we can only assume that our distribution of the Champaign County electronics recycling guide in response has been helpful.

Beginning in August, Joy Scrogum began meeting with Prairie Research Institute accountants who were being assigned to oversee funds associated with project, as part of the ongoing consolidation of services across the 5 State scientific surveys (including ISTC). This shifting of responsibilities has presented the need to bring new personnel up to speed on the purpose and objectives of this project. Along with these new personnel, Joy met with representatives of the UI Foundation. As mentioned in previous reports, the existing SEI Various Donors gift fund is being used for the deposit of corporate gifts and individual donations to the Illini Gadget Garage project. Joy asked many questions about allowable activities and other development activities; for example, she was given the green light to have a donation collection box at the Gadget Garage site, similar to what you might see at a museum. Instructions were provided on how to handle the deposit of funds as well as how to report and track in-kind contributions (of materials rather than cash via the UI Foundation (such as the tool donation made previously by iFixit). Joy also met with representatives of UI OBFS to ask questions about potential future activities (most of which are touched upon in the draft business plan) and how best to handle revenue that might be associated with those. The possibility of creating an activity code for this project under an existing ISTC self-supporting fund was considered with Institute accountants and ISTC personnel, and it was decided that establishing a separate self-supporting fund would be preferable to keep funds designated for this project clearly separate from others and to simplify tracking for financial personnel. In the latter half of the fall semester the process of completing paperwork for this self-supporting fund was begun, but with several Institute financial staff experiencing shifting and new additional duties during the consolidation process,

coupled with Joy's other duties and Martin Wolske being unavailable to assist with project tasks (more below), this task has not yet been completed. It is a top priority for spring 2017.

Joy Scrogum (ISTC) took the lead on project coordination during fall 2016; William Bullock (Art and Design) was busy with departmental chair duties and was not able to integrate the project into a class this semester. He did participate in some project team meeting and discussions and promote it to colleagues and students Project team member Martin Wolske (iSchool) included volunteering at the Illini Gadget Garage as one option for a service learning project assignment in his section of LIS 451 in fall 2016. Students were giving the option to work with one of several community groups/projects and report on their experiences in various ways for the course. Three of his students signed up to volunteer with the Gadget Garage (see "Student Involvement" section below for further details). Martin also intended to continue to be active in promotion of the project and decisions about administration along with Joy Scrogum. Unfortunately, Martin was seriously injured in a bicycle accident in early October. His initial prognosis was quite grim, but we are pleased to report that he has recovered beyond the expectations of his doctors and is no longer hospitalized. Even so, effects on his eyesight and memory mean that he will not be teaching or returning to regular departmental duties for the foreseeable future. Other representatives of the iSchool and Center for Digital Inclusion have been supportive of the project and done what they can to promote it to iSchool students and staff; this relationship is anticipated to continue in spring 2017.

Student Involvement and Outreach to Date:

In addition to Madeleine's work as a graduate student hourly and the business plan previously discussed, which was developed by graduate student Kinyetta Nance, three students from LIS 451 served as volunteers in fall 2016: Amanda Elzbieciak, Kelsey Riggs, and Geoff Jacobs. They assisted with cleaning and improving the interior of the physical space once ADA renovations were complete, manning open hours, and planning and manning outreach events, including our open house/grand opening, the America Recycles Day event, and our Recycled Holiday Craft event. They also assisted with marketing activities as mentioned below in the "marketing and promotion efforts" section. Their help was invaluable. As a product for the course, their group create a web site about their experiences. See

<u>http://kenshinrogie.wixsite.com/gadgetgarageproject</u>. We hope to use some of the photos and other materials featured on this site in the official site and social media networks during spring 2017. Their photos (along with others available on the Gadget Garage Facebook page) highlight the transformation of the interior of the space).

Given that Martin Wolske will not be able to help and that he won't be able to supervise iSchool students working in the space, it was decided that ISTC would hire student hourlies to assist Joy with project tasks during the spring so she could be their direct supervisor and focus her efforts on establishment of the self-supporting fund, revenue generating activities (e.g. workshop development) and pursuit of sponsorships. Madeleine will continue as an hourly employee of ISTC in spring 2017, and at the end of the fall 2016 semester, Joy and Madeleine interviewed several potential candidates for two posted hourly student positions. Ultimately, Amanda Elzbieciak, one of the volunteers from fall 2016, and Jarrett Zook (an incoming graduate student in spring 2017 who was previously working on product tests for Underwriters' Lab) were hired. A tentative schedule (considering only Madeleine and Amanda's schedules, as Jarrett was not yet in town) was developed (open hours at physical location MWF from noon to 3 PM and Tuesday and Thursday from 10 AM to 2 PM). We are considering having a day each week when pop-ups would occur off-site. This expanded schedule and increased capacity for pop-ups should greatly enhance our impact.

Joy was approached by colleague Karin Hodgin Jones (Art and Design) about doing a presentation on sustainable electronics/impacts of electronics during a course Karin plans to teach in spring 2017. Joy agreed to do a presentation, and will work with Karin on aspects of the course involving students' visiting the Illini Gadget Garage and becoming involved.

Joy also made plans regarding the iFixit Technical Writing program (see "Additional Comments" below), which will involve UI students writing repair guides for iFixit.com.

Marketing and Promotion Efforts to Date:

In addition to the events outlined above, project staff have worked with various journalists to spread the word about the project.

- Heather Muno of UI-7 did a feature on the project. See <u>https://www.youtube.com/watch?v=KdDd4jVOSXM</u>.
- Madeleine appeared on CiLiving to promote our involvement in the America Recycles Day event. See

https://www.youtube.com/watch?v=mwsGaUS7wHM&feature=youtu.be.

- Volunteers spoke to Katie Watson at our Recycled Holiday Craft Event for a feature on the iSEE web site: <u>http://sustainability.illinois.edu/gadget-garage-helping-illinois-</u> <u>community-with-diy-electronic-repairs/</u>.
- Madeleine was interviewed by Brian Dunn for a WEFT community radio broadcast after interactions at the America Recycles Day event. See <u>https://soundcloud.com/weft-90-</u> <u>1/cupn-dec-2-2016</u>.

Any events or project developments were promoted not only on the Gadget Garage web site, Facebook and Twitter accounts, but also via the Sustainable Electronics Initiative and ISTC blogs, online calendars, and social media accounts, as well as Joy Scrogum's personal social media accounts. Our volunteers also worked with Madeleine to post flyers on public bulletin boards in various buildings around campus and to create and distribute bookmarks with our URL and open hours on them. Joy Scrogum also promoted events and updates to the Sustainable Electronics Campus Consortium, and to her fellow members of iSEE's Purchasing, Waste, and Recycling SWATeam.

A flyer/handout was developed to take to various outreach events and to also make available to ISTC visitors and staff for distribution. See

http://www.sustainelectronics.illinois.edu/IGGflyer.pdf.

The Illini Gadget Garage Facebook page currently has 149 likes. We have 54 followers on Twitter.

Additional Comments:

Plans for spring 2017 include:

- Complete the efforts to establish a self-supporting fund for the project, and then begin hosting regular workshops with registration fees (e.g. the soldering workshop previously discussed with MakerSpace Urbana, cellphone screen repair, how to maintain or clean your device, etc.).
- Aggressively pursue corporate and individual sponsorships and donations to cover project costs moving forward. (Note that in addition to small cash donations in our collection box this past semester, and receipt of in-kind, material contributions from Joy Scrogum and other individuals, William Bullock made a \$1000 donation to the SEI Various Donors fund in fall 2016, and another individual donated \$50 via our online donation form. These funds will be used to cover costs after seed funding is exhausted and to support battery recycling and related activities.)
- Expanded open hours (as described above) and regular pop-up clinics, hopefully on the same day each week if possible (e.g. "Fix-it Fridays" at different locations around campus, including the UGL Media Commons, Sustainability & Innovation Living-Learning Communities, and University YWCA, among others).
- Marketing the project via <u>digital signage</u> across campus. Posting to these signs is typically free of charge. We will also pursue print ads in the Daily Illini and other outlets for specific events, as well as continuing social media marketing and participation in campus outreach events. We will also redouble our efforts to post flyers in various campus buildings, community libraries and nearby local businesses such as cafes. Our web site will also be more fully developed this semester and used more as a platform to educate not only about repair, but why extending the life electronics is so important.

Produce at least three new online repair guides as part of the iFixit Technical Writing program. Joy Scrogum promoted this program to the Sustainable Electronics Campus Consortium, and directly to professors she thought would be interested, but she is not aware of any of them having signed up to participate. During iFixit's solicitation for sign-ups, Joy converse with the iFixit team and received the green light to sign up herself, independent of a formal course, so that Gadget Garage student staff and volunteers could complete online resources under her guidance. Previous guides created by UI students are listed at

http://wp.istc.illinois.edu/ilgadgetgarage/repair/online-repair-guides-tips/.