

A Sustainability and Educational Initiative at the Ypsilanti District Library: an Overview and Future Recommendations

Kailynn Barton, Meg Nicholson,

Mikayla Mitchell, Katie Wei

2022



Executive Summary

Our team worked with the Ypsilanti District Library (YDL) on educational efforts and outdoor engagement efforts, specifically at the Whittaker location. YDL “serves residents of the City of Ypsilanti, Ypsilanti Township, and the portion of Superior Township that is not part of the Ann Arbor Public Schools district” and has been serving this geographic area starting in 1868 (“Service area”, n.d. & “Mission & History”, n.d.). YDL functions not only as a library, but as an invaluable educational resource to the children of the community. Our team collaborated with our sponsor to explore where we could implement sustainability efforts into patron education.

The first task we were given was to create educational STEM kits that patrons could check out and explore within their own homes. STEM kits are composed of a few books and the materials for an educational activity. Each member of our group was in charge of creating a concept for a STEM kit, and determining the materials that would go inside of each of the kits. We were also tasked with creating outdoor signage. All of our team members were responsible for creating six signs for their assigned season. Each sign contains educational information related to that specific season and the processes occurring in the natural world at that time. For example, one of the summer signs discussed the life cycle of a plant.

We suggest that the library do more to advertise these kits to ensure all patrons are aware of them and the potential benefits of their children getting to interact with STEM topics in a hands-on manner. The library could potentially implement a function on their catalog that recommends patrons a different but similar STEM kit if the one they were hoping to use is already checked out. In order to optimize their outdoor area, we suggest they purchase and utilize stones to create a path to connect the two areas. Other options to further connect these areas and increase outdoor engagement include: geocaching activities, an outdoor iSpy with natural flora and fauna, or a play structure.

The STEM kits have the potential to expose young patrons to new concepts, and are expected to generate further interest in STEM with this age group. YDL could also have additional resource recommendations for patrons who are interested in specific kit topics, in order to continue their learning after they're done with the kit. The stepping stones and outdoor signage are expected to increase outdoor engagement and help to connect the garden area to the rest of the outdoor area. We recommend that YDL share the addition of the new STEM kits, new outdoor signage, and new pathway on their social media. We also suggest that YDL consider expanding some of these programs to their other library locations in order to reach the maximum number of patrons possible.

Introduction & Background

For our project, we worked with the YDL. According to the YDL website, the YDL is a public resource that “serves residents of the City of Ypsilanti, Ypsilanti Township, and the portion of Superior Township that is not part of the Ann Arbor Public Schools district” (“Service area”, n.d.). YDL has had a long-standing presence in its community—having been established over 150 years ago (“Mission & History”, n.d.). This library system has three locations: Superior, Michigan, and Whittaker (“Service area”, n.d.). For our project we worked specifically at the Whittaker location. Not only does this library system offer books available for the public to borrow, it also supports extensive outreach and educational efforts (“Mission & History”, n.d.).

First, our group aimed to help the library with their educational efforts by developing teaching materials for children about sustainability. We wanted these children to have an at-home option for learning about sustainability. Further, after discussing with YDL about their current offerings, we aimed to expand their STEM kit opportunities.

Second, we strived to promote engagement with the surrounding outdoor areas. There are many different aspects of the Whittaker location at YDL that provide great learning opportunities—such as the rain garden and produce garden. Our group aimed to help provide educational materials to accompany these areas. We hoped that these would foster inquiry regarding topics surrounding sustainability in a manner that is interesting for the children visiting the library. Further, we discussed how increased educational signage may help increase cohesiveness between these areas and facilitate increased visits to these spaces.

Activities

Early on in our project, we met with our contact at the library and discussed group expectations for this project. Our main goal was to have each of our members create a STEM kit. YDL’s STEM kit program allows patrons to take home different science, technology, engineering, and mathematics learning activities that they may not have access to otherwise. Our group was tasked with making sustainability-oriented kits that could introduce young patrons to the concept of sustainable living on a manageable scale. In our initial meeting, we also discussed the possibility of helping the library connect their outdoor areas, or potentially applying for grants to help build a play structure. After we completed our STEM kits, each member of our group picked a season, and we were tasked with making outdoor signage that corresponds with each season. Each group member created six signs.

In order to create the STEM kits, we brainstormed ideas for each kit as a group. We then located appropriate materials for each kit via Amazon and some science kit specific websites. Each kit contains a book or two that is relevant to the topic, instructions, and activities for the children that check out these kits. The kits also have a specific minimum age that is recommended due to

the difficulty of the contents of each kit. A cost breakdown of each kit was submitted for approval, and each kit was reviewed by our sponsor at the library. For each sign, our group was tasked with providing educational material that corresponds with our chosen season. For example, the group member who created signs for summer created an educational sign about the strength of the sun and one about the life cycle of a plant. We used the website Canva to create the signs. These signs will be displayed throughout the outside of the library during corresponding months as a way to educate young patrons while they explore the garden area.

The last part of our project for the library will include a proposal for several concrete stepping stones. Our plan was for the library to host an event where young patrons could help create the stepping stones that will be used to connect the outdoor areas. The garden has a distinct outdoor area where the gardens are located, and another area with a sand pit and seating for parents. The goal of these stones is to create a visual path that will guide patrons from one area to the other. Decorating the concrete stones allows patrons to get involved in a permanent part of the library, and will be a way to help demonstrate the importance of the library to the community.

Results and Recommendations

Stem kits allow patrons to learn about the subject of choice in an interactive, sustainable way. The stem kits do not require materials to be replenished and reach a wide audience. Topics include: solar panels, rain gardens, interacting with the natural world, and learning about animals. To further increase this range, the library can ensure that all patrons are aware of these kits. This can be done by creating a poster that is posted near the entrance of the library or including it in emails to patrons. Furthermore, to prevent discouragement if a particular stem kit is not available, there can be a section on the website that suggests similar stem kits. This can be generated by pulling stem kits in the same category as the one that the patron is viewing. Suggestions can be supplemented with data of checkout patterns and which stem kits patrons who have checked out this specific kit have also checked out.

Signs relating to aspects of nature and science were created for each season. These can be posted around the library to increase engagement with outdoor spaces. Furthermore, the outdoor space in the front of the library can be connected to the gardens with a path. We propose creating a path through the grass denoted by cement bricks that can be made as a library event. This event would invite patrons to come design and decorate their own paver to line the path. Materials necessary include: cement, something to mix cement in, molds (aluminum pans are great for this), decorations (pebbles, other things that will not decompose), water and some tools for decoration (Rose, 2019). Decorations could be hand prints, drawings, mosaics, leaf imprints, and more. This proposal aims to optimize the outdoor areas and increase patron engagement.

Additional recommendations to further optimize outdoor spaces include: geocaching, an iSpy type activity, and a play area. Geocaching is an activity occurring outside in which players search for hidden containers at noted locations. This is organized on a platform, Geocaching, that maintains a database of active caches and GPS coordinates. To implement this, the library would create a cache hidden somewhere in the outdoor space and provide a GPS for patrons to use to find the cache. This activity would increase engagement and provide and potentially introduce GPS to younger kids. For the iSpy activity, it could be changed seasonally. The library would provide a sheet (virtually or physical) with flora and fauna or locations around the library for patrons to find. Lastly, a play area would provide a space for kids to run and jump around. This could be as simple as a few logs half buried in the ground for kids to use as balance beams. A more elaborate inclusion could be a play structure or other items, such as tires, to climb on.

Anticipated Impact

Given previous popularity of the STEM kits, additional kits will allow more families to utilize this resource. With a growing variety of kits offered, identifying popular kits could help YDL expand their offerings on topics of particular interest. For these topics, the YDL could offer suggestions for further involvement within and outside of the library. Opportunities within the library could include events where children are able to meet professionals in a field of interest, participate in a group activity together, and ask an expert any questions. External opportunities could include organizations families can volunteer with, nearby museums, or other partnerships suitable for the topic of interest.

The seasonal outdoor signage will add structure to outdoor time facilitated by the library. These signs can be used in various self-guided (with parent or guardian supervision) or group activities the YDL hosts. In tandem with the outdoor signage, the goal of implementing stepping stones or a play structure is to see an increased use of the YDL outdoor area and create a more connected space for children.

The arrival of new STEM kits and a re-envisioned outdoor space offer the opportunity for YDL to announce library updates on their various social media outlets as well. With the attention these posts might attract, YDL can utilize this momentum to highlight other less-used library resources that complement these new arrivals.

Furthermore, successful implementation of events and programs enhanced by the STEM kits and outdoor signage may be used as a template for replication at other YDL locations and the outdoor connection proposal can be used as a framework for a future team or group within the library to actualize. Our intention is that our work will enhance the sense of community, recreation use, and involvement opportunities among YDL patrons and foster an open space for children and families of the surrounding community to explore and learn about sustainability.

References

Service area. Ypsilanti District Library. (n.d.). Retrieved March 17, 2022, from <https://www.ypsilibrary.org/about/service-area/>

Mission & History. Ypsilanti District Library. (n.d.). Retrieved March 17, 2022, from <https://www.ypsilibrary.org/about/mission-history/>

Forge Your Own Path: 6 Ways to Make DIY Concrete Stepping Stones. (2019, June 12). *Garden Therapy*. <https://gardentherapy.ca/diy-concrete-stepping-stones/>

Partner Organization

Ypsilanti District Library

5577 Whittaker Road

<https://www.ypsilibrary.org/>

(734) 482-4110

Key Contact

Jodi Krahnke

Head of Youth Services

(734) 879-1304

jodi@ypsilibrary.org