
Background: The Children’s Museum of Fond du Lac (CMFDL), was incorporated in 2004. It focuses on delivering high quality programs to children birth through twelve, welcoming 40,000 visitors a year with most of its traffic from Fond du Lac County (population 101,603). CMFDL’s mission is to create hands-on learning experiences through interactive exhibits and educational programs that engage children and their caregivers in the partnership of learning through play. The museum offers environments for social and emotional development as well as educational experiences spanning sciences, technology, arts, financial, languages, humanities, physical health and more. With 6 FTE’s, community partners play a critical role in its ability to effectively educate and engage the community.

Marian University (MU), a catholic based, applied liberal arts university with an 80 year presence emphasizes the value in combining academics with on-the-job training, service learning and community partnerships. This focus and the ability to provide enriched research experiences for its students, drove MU’s support of the implementation of a Living Lab (LL).

Goals of the NLL Stipend Award: Seeking to build an effective framework to support the long term sustainability of LL programming at CMFDL, while providing sustainable research and enriched educational experiences for MU partners was the main project goal. This included setting up the physical site, creating branding materials, incorporating the experience into the curriculum, and defining policies and procedures to support participants (staff, university, visitors).

Our initial strategy was to start small, although our research focus grew to include both psychology and biology students. Gathering knowledge and best practices from the NLL website and contributing host sites (especially Madison), helped the project team keep focused on the education and research goals of the LL. CMFDL and MU now have invaluable experiences that have uncovered new goals focused on continued programming and resources.

Enhancing the Visitor Experience: The Living Lab allowed children and their caregivers to experience two new learning opportunities at CMFDL during the Stipend period. It added ‘on the floor’ programming to their museum experience. Specifically, MU conducted two studies, the “Sticker Study” and the “Germs Study”. Museum participants were able to participant in fun experiments lead by the MU students and faculty. The following chart summarizes both studies:

<table>
<thead>
<tr>
<th>Month</th>
<th># of Participants</th>
<th># of Educational Opportunities</th>
<th># of Research Toy Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>Unknown</td>
<td>Psychology - Started On-Site Feb 21, Biology - Started On-Site Feb 28</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>13</td>
<td>Unknown</td>
<td>0</td>
</tr>
<tr>
<td>Mar</td>
<td>23</td>
<td>68</td>
<td>12 (germ light)</td>
</tr>
<tr>
<td>April</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
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“My daughter participated in the sticker game. She talked about it for days after. She found it interesting and asked many of her friends if they had done the game. She would definitely be interested in participating in additional studies in the future. I had the chance to talk with the MU student about the study. Understanding the goals of the study and reviewing summaries about the results would help me draw application to parenting.” Parent, child age (7)

Mutual Professional Development: The professional development experiences were supported by the NLL website, newsletters, networking with host sites and meeting with project team members. Project collaborators (highlighted in chart below) also benefited by participating in the Midwest Regional Symposium (March 2014) and the West Coast and Mid-West Cohort Meeting (April 2015) and various state and national museum conference where knowledge and best practices on mutual professional development were gained. The following chart highlights major project collaborators:
“Having participated in the Midwest Regional Symposium in 2014, I was eager to see the Living Lab implemented at the Museum. With a small team, we were able to involve all staff members in this experience. By watching the children and families interact and reading about “Blicket” studies from other sites, I am able to better design and make modifications to our current exhibits.” Cyndi Trent, Exhibits Specialist and student (BA - Public History and Museum Studies)

"The Living Lab provides a great opportunity for the students to interact with members of the greater community in a more informal setting and have a discussion on scientific concepts." Dr. Lalitha Ramamorthy, Biology

Research Happenings at Our Site: The Psychology Department shared the “Sticker Study, to examine the influence of preference on children’s altruistic behavior as reflected by sharing outcomes. Participating children ranked the stickers given to them by a research assistant. They were also asked if they would be willing to share the stickers with one anonymous unknown child who was “coming the next day”.

The Biology Department shared a study regarding “Germs and Personal Hygiene.” The purpose of this on-going study is to determine “at what age does a child begin to understand the concept of germs”. Children were able to examine the presence of “germs” under a black light and engaged in learning not otherwise offered at the Museum.

Both studies are in their infancy stages. The Psychology study did share a finding that although they had a hypothesis that children from larger families would be more apt to share, this has not been proven with the data collected to date.

“The Living Lab provided our college students a supported environment to conduct the real-world experiment. By interacting with the staff in the children museum, our students learned to be more disciplined. We appreciated this valuable collaboration for offering students the opportunity to make the contribution to our local community.”

Dr. Gail Han, Psychology

Outcomes and Future Goals: Our next goal will focus on creating valuable educational opportunities for museum visitors, aligning with their interest and enriching research greetings. We will utilize museum educators and volunteers with experiences in early childhood, as well as continue to work with community partners.

During the Stipend period, the MU Biology Department identified a senior /junior team with the intent that the junior student would continue the onsite research in the Fall of 2015. They have developed a best practice model for sharing and building upon their research experiences. At the conclusion of the Stipend period, the MU Psychology Department indicated that their future participation in the LL at CMFDL was unlikely because of their struggle with limited resources (i.e. professor time, appropriately experienced students and enough students to conduct the research). Thus, CMFDL is investigating additional partnerships the University Wisconsin-Oshkosh Graduate Research Psychology Program.

Thank you for this opportunity!