



National Living Laboratory 2014-15 Cohort Stipend Final Report

KidsQuest Children's Museum and The Institute for Learning and Brain Sciences

Who Are We?

KidsQuest Children's Museum is a hands-on museum in Bellevue, WA that engages children birth to age 8 and their families through educational exhibits and programs. KidsQuest strives to integrate science, technology, engineering, art and math for whole-body, whole-brain whole-family learning.

The Institute for Learning & Brain Sciences (I-LABS) at the University of Washington is an interdisciplinary research, education, and outreach center. I-LABS is dedicated to discovering the fundamental principles of human learning, with a special emphasis on early learning and brain development.

KidsQuest and I-LABS started working together in 2008. However, this partnership had been inconsistent. The Living Laboratory model provides a framework for a more consistent and meaningful partnership. Additionally, the goals of the Living Laboratory program fit perfectly with both institutions visions for their education and outreach efforts.

The Living Laboratory program takes place once a week at KidsQuest Children's Museum on the 1st & 3rd Wednesdays and 2nd & 4th Tuesdays of the month from 1-3pm. A team of I-LABS researchers and outreach staff transform a small exhibit area into a space for data collection and education.

Goals of the NLL Stipend Award

The goal of this stipend project was to begin a formal partnership between KidsQuest Children's Museum and I-LABS using the Living Laboratory model. This included coordinating staff, assessing space availability and requirements, advertising the program, implementing the program, and evaluating the impact of this new endeavor. We created a banner to designate the program space and stickers to thank participants and help recruiters recognize who had already participated. These stickers prompted one child to proudly and loudly exclaim "I HELPED A SCIENTIST TODAY!" after participating.



The Construction Zone at KidsQuest as an exhibit and Living Laboratory space

Enhancing the Visitor Experience

So far, the partnership has facilitated 19 I-LABS team visits with 350+ Educational Opportunities and 10+ Participants visiting our Living Laboratory. The visitors we surveyed reported that they learned something, that their children enjoyed the experience, and that the Living Laboratory enriched their visit. As one mother explained after visiting Living Laboratory with her son, "We'll be back the next time the [University of Washington] is! It was awesome, interesting!" It's not just the adults who are learning about science, one wonderful anecdote illustrates the many valuable conversations that the program



Stickers used to thank Living Lab Participants



Living Laboratory.
Developed at the
Museum of Science, Boston

inspires. A young girl was carefully listening to the researcher explain that he was studying kids' brains. She looked at him thoughtfully and asked "But, if you're studying my brain, don't you have to cut me open!" This prompted a rich conversation about research methods.

Mutual Professional Development

Our core Living Laboratory Team consists of:

- Sarah Roseberry Lytle, Ph.D., Director of Outreach and Education at I-LABS
- Alison Luk, Associate Director of Education at KidsQuest
- Dario Cvencek, Ph.D., Research Scientist at I-LABS
- Craig D. Maddox, Research Study Assistant at I-LABS
- Lily Shafer, Outreach and Education Assistants at I-LABS
- Ursala Schwenn, Research Assistant at I-LABS



Family Participating in Living Lab program

Additional assistance is provided by the KidsQuest marketing team who assisted in advertising the new program and created signage, as well as, the KidsQuest floor staff who assist in weekly set up and cleanup of the space.

The team has been enthusiastic about the program and its impact. Alison Luk, Associate Director of Education at KidsQuest, explains, "The Living Lab model provides a unique format for getting families thinking about science in a new way. Living Lab starts conversations and provides a unique real-world experience with science." Craig Maddox, Research Study Assistant at I-LABS, agrees, "It's great that we were able to talk to so many parents and kids about the research we are doing at I-LABS, and I think the kids really enjoyed helping us with our science project!"



Living Lab participant and researcher

Research Happenings at Our Site

The research conducted through the Living Laboratory collaboration between KidsQuest Children's Museum and I-LABS is investigating the development of stereotypes in children. The project asks when gender role stereotypes develop by measuring school-aged children's associations of work and family concepts with men and women. This is done through a computerized sorting task (modified version of the IAT) in which children pair words based on specific directions. Data collection is ongoing, but we predict that both boys and girls will associate men with work more strongly than they will associate women with work. Future studies will explore interventions aimed at preventing children from limiting their own future interests—including occupational ones—simply because of gender.

Outcomes and Future Goals

We plan to extend the program beyond the end of the stipend project. Data collection may be interrupted by other demands on the research team's time, but we plan to continue Living Laboratory on a regular schedule by featuring educational activities led by I-LABS outreach staff. These activities will illustrate research methods and specific studies while also giving the outreach team time to speak with adults about I-LABS's work and the work of child development researchers in general. Additionally, our visitor surveys made clear that most Museum visitors are still not aware of the program (or may not recognize the name of the program), so our next goal is to brainstorm ways to increase awareness.