

EDUCATION

littleBits™

LITTLEBITS EDUCATION COMMUNITY CASE STUDY

CHILDREN'S MUSEUM PROGRAMMING WITH LITTLEBITS

BY

Prince Baron

TITLE

Public Programs and Exhibits Supervisor

ORGANIZATION

Children's Museum of Manhattan (CMOM)

AGE LEVELS

Ages 2-12; primary focus is early childhood

LITTLEBITS PRODUCTS USED

Workshop Set

DATE

May 29, 2014

PRINCE BARON

PUBLIC PROGRAMS AND EXHIBITS SUPERVISOR



Prince Baron started working with children his freshman year in college. Working in AmeriCorps as a JumpStart member, he realized he loved having an impact in this world by helping children prepare for their future. After two years of his service, he earned an AmeriCorps Education Award.

In 2009, Prince started working as a Part-Time Educator at The Children's Museum of Manhattan (CMOM) right after he finished his service with AmeriCorps. His responsibilities included facilitating programs, engaging with the public, writing lesson plans and hosting performances and events. He has since become a full time employee at CMOM and is currently the Public Programs and Exhibits Supervisor.

HOW DID YOU LEARN ABOUT LITTLEBITS AND WHAT MADE YOU DECIDE TO IMPLEMENT THEM INTO YOUR PROGRAM/CLASS?

We learned about littleBits about two years ago and last Spring we visited the office to meet the team and see what could be possible. We wanted to implement littleBits at the museum to draw in an older crowd of children for the programming. The museum wanted to focus on incorporating littleBits into the science and engineering programs.

A CMOM hosts a workshop combining littleBits with craft materials.



EXPLAIN HOW YOU INCORPORATED LITTLEBITS INTO YOUR PROGRAM/CLASS? DO YOU HAVE AN OUTLINE OF YOUR PROCESS?

Using the Student Set as our primary toolset, we created sign-up classes for ages 6+ for a maximum of 12 children. Adults were encouraged to help out during the workshop, but the focus was on the children. Participants were split into groups of 3, or occasionally we led a whole group project. Projects included ice skaters, an owl with flapping wings, cars and robots. Materials used were mostly recycled and donated materials.

We then moved littleBits into the STEAM Lab, which was more of an open, free-flowing play experience. Children of all ages were very drawn to the product, which led to high demand and high use. The facilitators shared ideas on how to build with the modules and helped the children explore circuits.

Read more information about the STEAM lab:
http://www.cmom.org/explore/exhibits/steam_lab

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WHAT WORKED WELL?

We had the greatest success with an organized classroom setting that was led by a museum facilitator. For older children (10+), unsupervised play is more manageable.

A Workshops begin by introducing the modules to the children and exploring how they relate to circuits in real life.



B By combining other materials, children start exploring engineering and design concepts.



WHAT WAS A CHALLENGE?

The open space was more difficult to manage with so many excited, inquisitive children wanting to use the littleBits. Younger children were usually less gentle with the electronics. We learned we needed more staff to supervise the exploration and explain how to use and handle the modules.

WHAT HAS BEEN THE RESPONSE OF YOUR STUDENTS/COMMUNITY?

Everyone really loved the littleBits sessions and were very enthusiastic; lots of happy and smiling faces. The parents enjoyed seeing how the product could be used for educational purposes and mentioned that they saw it as a great way to jump start their children's interest in electronics and programming. Participants were engaged and curious to learn more. The best part was that all ages were able to use it and found it interesting.

A Testing out the outputs: bargraph, buzzer, LEDs and DC motors to make a blinking, beeping and spinning invention.



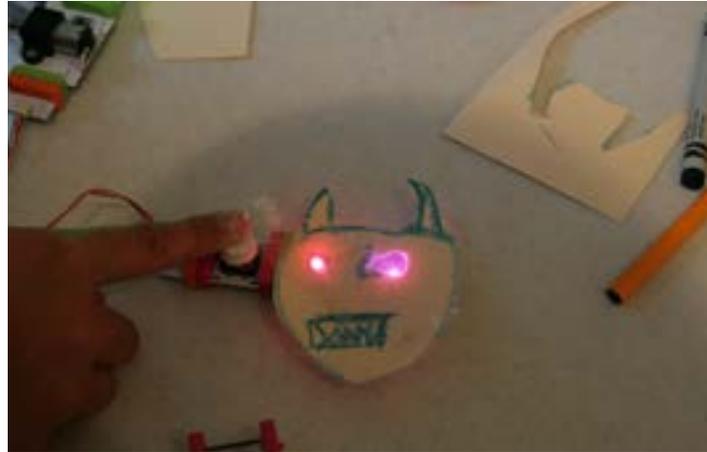
B Samples of the projects that were made in the workshops.



HOW WOULD YOU SUMMARIZE WHAT YOU'VE LEARNED IN IMPLEMENTING YOUR LITTLEBITS PROGRAM/CLASS?

We really enjoyed using littleBits at CMOM. We learned that the facilitators need to be trained in the technology and be good at public speaking to help children understand the concepts. Having sign ups for the classes was the best way to create an impactful experience. It's been useful to relate circuitry to real life situations and products.

A Using a button and a RGB LED a monster comes to life.



WHAT ARE YOUR FUTURE PLANS FOR LITTLEBITS USE?

The STEAM Lab exhibit wrapped up in mid-May, where the littleBits were primarily being used. We'll be using littleBits in special programs in the future. We're thinking of how to focus on product design and incorporate littleBits as the electronic components.