

EDUCATION

littleBits™

LITTLEBITS EDUCATION COMMUNITY CASE STUDY

## **PUBLIC LIBRARY PROGRAM**

BY

Lisa Goldstein

TITLE

Division Chief of Central Youth Wing at Brooklyn Public Library

BY

Andrea Vaughn Johnson

TITLE

Coordinator, School Age Services

ORGANIZATION

Brooklyn Public Library  
Brooklyn, NY

AGE LEVELS

Age 6 to teen, Adult Library Staff

LITTLEBITS PRODUCTS USED

Workshop Set (modified)

DATE

May 2014

**LISA GOLDSTEIN**  
Division Chief of Central Youth Wing  
Brooklyn Public Library



Lisa Goldstein has worked as a youth services librarian for the past ten years, and currently manages the Youth Wing of the Brooklyn Public Library's Central Library.

**ANDREA VAUGHN JOHNSON**  
Coordinator, School Age Services  
Brooklyn Public Library



Andrea Vaughn Johnson has worked in children's libraries for eighteen years and as Coordinator of School Age Services, plans Brooklyn Public Library's Summer Reading program and other learning and literacy initiatives.

**WHO WERE THE KEY PEOPLE IN YOUR ORGANIZATION THAT MADE THIS PROJECT POSSIBLE?**

**Grant from the Institute of Museum and Library Services**

National Leadership grant (using Mozilla Open Badges in programming and expanding STEM programs)

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

We hosted a Maker Faire at our Central Library with Hive network members, and littleBits attended.

What really attracted me to littleBits was they allow us to offer a tech program without a laptop or wifi. We're trying to expand our tech programming for youth but some of our locations do not have the equipment or wifi strength to offer technology programs to groups.

littleBits also has an appealing, kid-friendly look and using them is very intuitive!

## EXPLAIN HOW YOU INCORPORATED LITTLEBITS INTO YOUR PROGRAM?

We start with a training workshop for our librarians before we send out kits to our 60 locations for programs. The first step was bringing them up to speed. Then a slow rollout to Teen Tech Time and Tween Tech Time at the Central Library - did an introduction, and demo, to allow them to explore.

Next step was to introduce a project idea. After being inspired by Paul Newman popcorn video, we had them animate an Einstein photo. Everyone really understood these concepts quickly. We then went to iterative art with the art bot project.

We also did an activity station during a Coder Dojo event on the weekends - 2-3 hours where people could drop in and explore and play with the modules.

That worked really well but drained the batteries. However I saw a lot of kids collaborating and helping one another - kids who had been playing a while would show new people what to do when they came up to the table.

...kids who had been playing a while would show new people what to do when they came up to the table...

## WHAT WORKED WELL?

It's something that people can grasp quickly and work independently. The modules are very attractive to a broad age range and to both boys and girls.

littleBits makes STEM concepts accessible along with circuitry - budget-wise and tech-wise. We not only saw the Kids get excited, but the staff were excited as well. We received comments like, "THAT WAS AWESOME!" from some of the kids.

It could work well to have a focused project with a discreet amount of Bits and take the focus off of open exploration.

## WHAT WAS A CHALLENGE?

Keeping track of all the pieces! Creating a project where they have enough creativity with what they've been given.

It's important to provide a balance between giving students the freedom to experiment with a range of littleBits, but also to keep track of the pieces, and to guide students when they're using too many at once.

littleBits are a bit like glitter - kids are so attracted by them that they start to think that the more they have, the cooler their project will be.

## WHAT HAS BEEN THE RESPONSE OF YOUR STUDENTS/COMMUNITY?

First, they are enchanted with the look of the littleBits. Following that, I think there's some relief and joy in the fact that they are so accessible to use and understand.

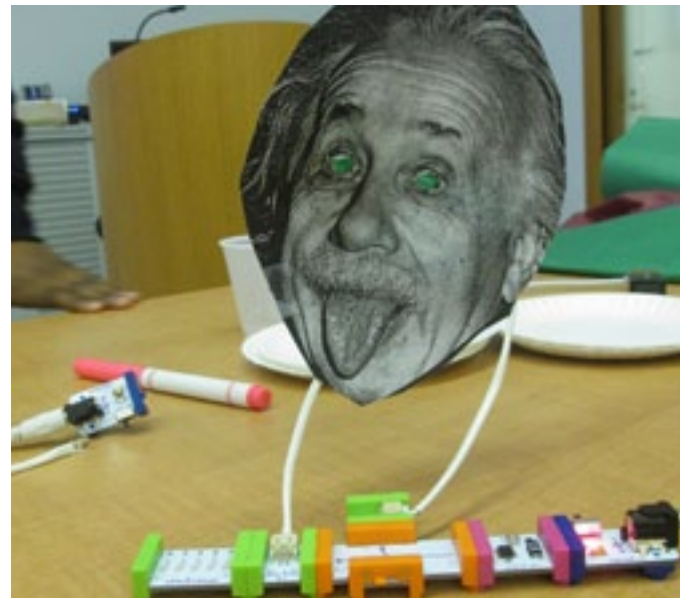
## HOW WOULD YOU SUMMARIZE WHAT YOU'VE LEARNED IN IMPLEMENTING YOUR LITTLEBITS PROGRAM?

littleBits are versatile in terms of programming. It's easy to incorporate them into a very casual program where they're put out to play and experiment with, but there is also such a range of projects to focus on, from crafts to robotics.

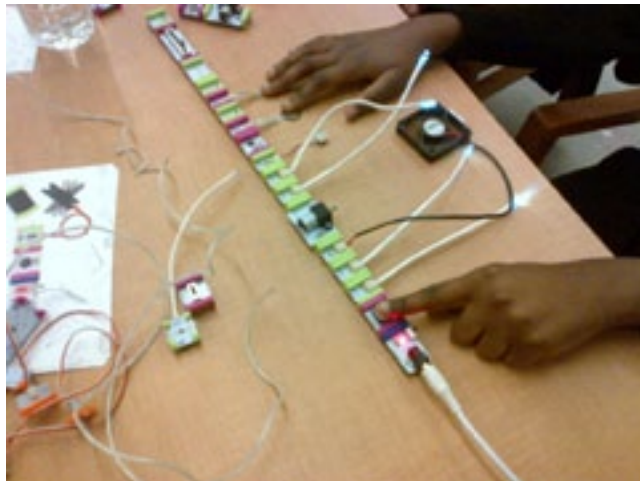
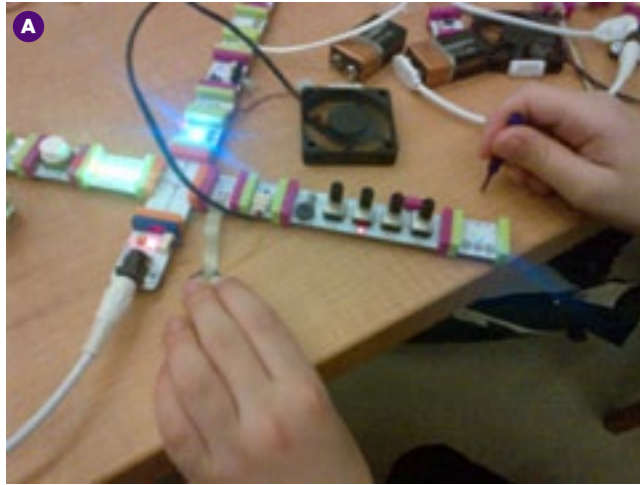
## DO YOU HAVE PHOTOS OR VIDEOS THAT YOU CAN SHARE?



A Examples of the "Einstein" project.



**A** Fun with circuit building.



## **DID YOU UPLOAD PROJECTS OR LESSONS TO OUR WEBSITE?**

No, but we used many of the projects uploaded for inspiration, and screened them during the programs as further inspiration.

## **WHAT ARE YOUR FUTURE PLANS FOR LITTLEBITS USE?**

We are planning to use them in programming for a summer camp that visits the library and other cultural institutions in Brooklyn.

Each institution provides programming that reflects its unique nature, and we are going to host a mini Maker Fair involving Makey Makeys and littleBits.

We will also have a littleBits activity station at our June 5 [Summer Reading kickoff](#) event, which will be a science festival inside and outside the library. We would also like to incorporate them into our craft programs.

The additional Sets purchased with grant funds will be shared among our librarians for programs in the branch libraries. We feel that programs like these highlight the library's role in providing access to and education about emerging technologies.