

## Making the "A" in STEAM education stand out!

### Innovative projects using littleBits in the classroom

#### Featured Project detailed by littleBits Teacher

Students at École Central Elementary - School of the Arts - are always expected to weave art into their final projects.

When we first introduced littleBits® to our Little Tinkers Club, the students not only had to complete a functional challenge, they also had to make something beautiful.

The first challenge we undertook in 2017 was to "invent something using LittleBits that improved your quality of life." The invention had to count something so we could track the number of times a desired (or undesirable) behaviour occurred.

The challenge winners were a trio of girls who created a prototype for a toilet seat that helped boys in their unisex bathroom put the seat down after use. "When the seat goes up, it depresses the push button switch and shines an LED into the eyes of the person using the toilet."



In 2018, we challenged students to incorporate LittleBits into the set design for our school musical. The winning design came from a brother-sister team who used a pair of simple circuits to light up the eyes of the Aladdin Sand Tiger set. The first time it was deployed on stage, little kids in the audience screamed and cried, which we took as high praise!

This year, the set challenge was reissued to our club and they didn't disappoint. Four teams collaborated on how to repurpose & recycle materials to make the Darling's Nursery Set (Peter Pan Junior) look more realistic. They worked in pairs to make 4 sconces that added a homey feel to an otherwise plain set.

In BC, we have the privilege and the freedom to play with a new curriculum that allows learners to

- design things that respond to identified needs.
- acquire additional skills in order to engage in complex task and
- explore multiple tools and technologies as they inquire into those tasks.

It's been my pleasure to work with LittleBits as my students develop Design Thinking skills.





They are such user-friendly ways for kids to explore simple circuits at the Elementary School level. My students feel empowered to ideate, prototype, test, make, collaborate and share their creations. I used to teach simple circuits with a soldering iron and wire, but would never go back to that style with this age group. In a few moments and with a few clicks, my students are making functional, beautiful inventions. They're collaborating on projects. They're thinking of ways to improve the world around them. If those aren't hallmarks of 21st Century learners, I don't know what is! Many thanks to Jarrod Bell for initially putting these great pieces of technology into my hands and to Broyden Bennett, for keeping our school well supplied with enough kits to keep our creative fires burning.

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