Makerspace Proposal

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Classroom Research EDET677

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Introduction to Proposal

In the Sitka School District the vision statement reads:

"Foster each child's maximum growth in academics, social-emotional and physical wellbeing. Prepare children for their chosen careers, and inspire them to become active, informed community members by providing:

1. Relevant, innovative, and engaging learning opportunities;

2. Clear goals and high expectations;

3.Opportunities for collaboration among students, parents, staff, and community using an active outreach to stakeholders; and,

4. A culture of respect for self and others, and no tolerance for bullying.

A Makerspace is the perfect addition to my school's vision statement because it supplements all these distinguished areas.

Relevant, innovative, and engaging learning opportunities are the foundation of a Makerspace. Students get choice, which makes the learning relevant to them. They are creating and using their reasoning skills with innovation at the forefront. Lastly, the learning opportunities are endless and inspire continuous learning.

During a Makerspace, there is an end goal in sight. Students are expected to use mature and responsible decisions to accomplish the goal of the project. While students may only internalize this as far as the project goes, they are gaining valuable life skills through a Makerspace. We want students to become active innovators and creators rather than passive listeners, and this is exactly what we see come from a Makerspace.

The third vision of my district hopes for collaboration and outreach from parents and the community. Makerspace is a genuine and authentic way to bring in the outside community. From asking for donations, to bringing in a relevant spokesperson, the community can be directly involved in a Maker movement. Say, for example, students are making robots or learning about circuits. To supplement their making, a computer scientist in the community could come in and talk about how they apply the learning in their daily life. It is a truly authentic learning experience.

The last vision is creating a culture of respect for self and others. When students are pushed to try, fail, and succeed, it deepens the learning and also pushes out the notion of perfection. Students embrace the possibility of trial and error and learn to encourage themselves and others. Although respect, integrity, and honesty are not outright encouraged throughout an entire Makerspace session, they are built within. As students see other peers move through frustration, hopefulness, and success, they learn to relate and see each other as one and the same. These underlying characteristics of a Makerspace guide students towards naturally gaining life teamwork skills.

Materials and Costs:

The Makerspace in my room is a TechShop where the goal is to tinker with electronics and technology to create something of the students own creation. The following materials to start-up the TechShop:

1. 2 Classroom Chromebooks: $191.00 Each Total = $382
2. (optional) 2 class Kids Tab E Lite 7.0" 8GB (Wi-Fi): $99.99 Total = $200.00
3. Chibitronics kit = $110
4. Chibitronics Love to Code: Chibi Chip & Cable = $30
5. Free Code.org and Scratch.com

Total Cost: $522 (with optional tablets, $722.00)

Rules and Procedure of TechShop

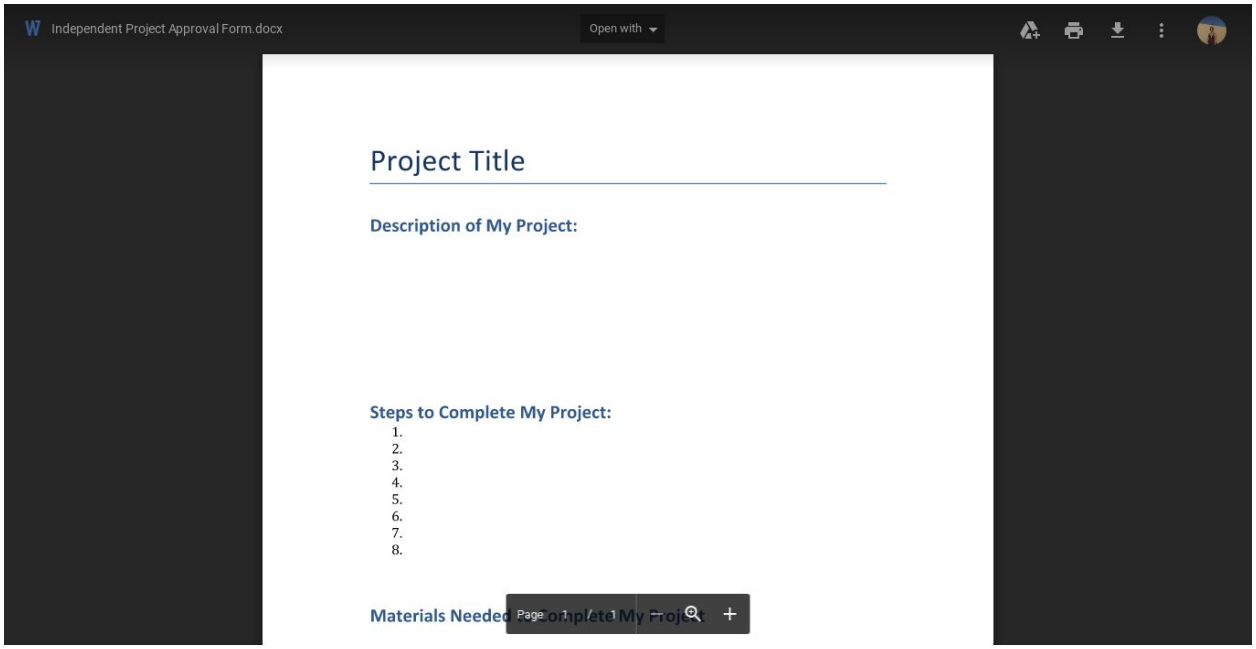
Rules and Safety:

The following guidelines will be discussed and posted by the TechShop so that all students are responsible Makers:

1. Ask permission to use TechShop
2. TechShop items will not be removed from the TechShop area, unless given permission.
3. Keep a kind, respectful, and honest conversation with friends and adults.
4. Must have an adult or TechHelper near you when tinkering with the circuits.
5. No throwing, kicking, or mishandling the tools. Two hands on computers and tablets.
6.

Procedure for TechShop:

1. Students can only begin tinkering with tech shop when they submit the project proposal to teacher. See below:



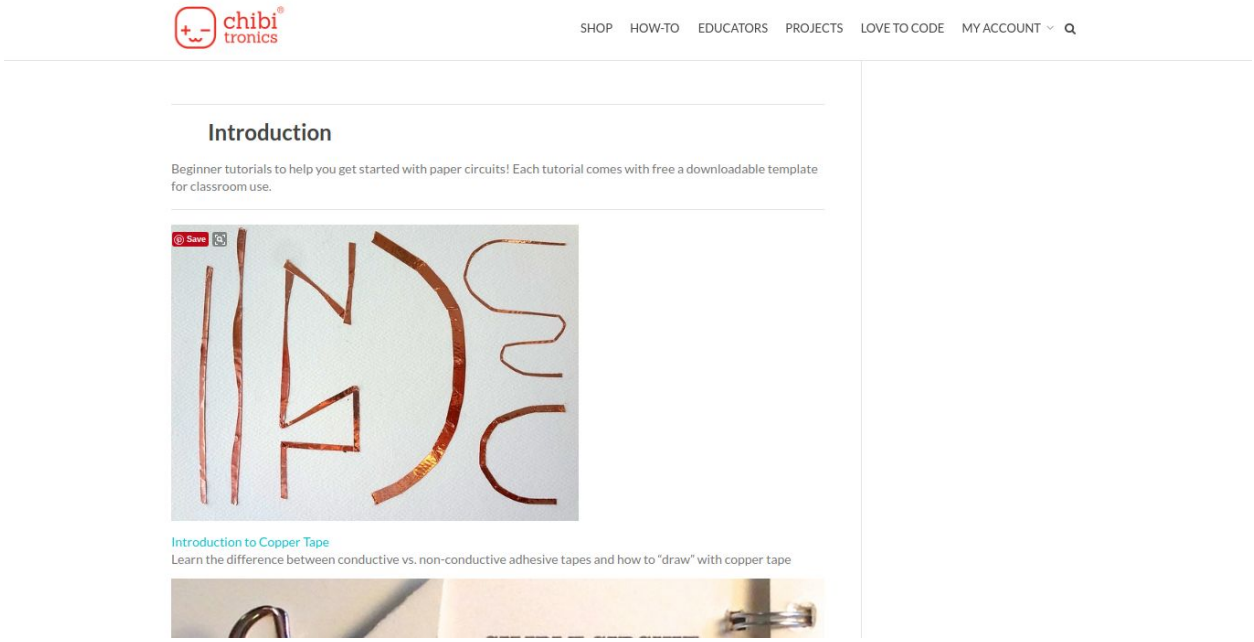
https://drive.google.com/file/d/0B1Dj9s63l2RBSG5UU2doNUxhMmc/view

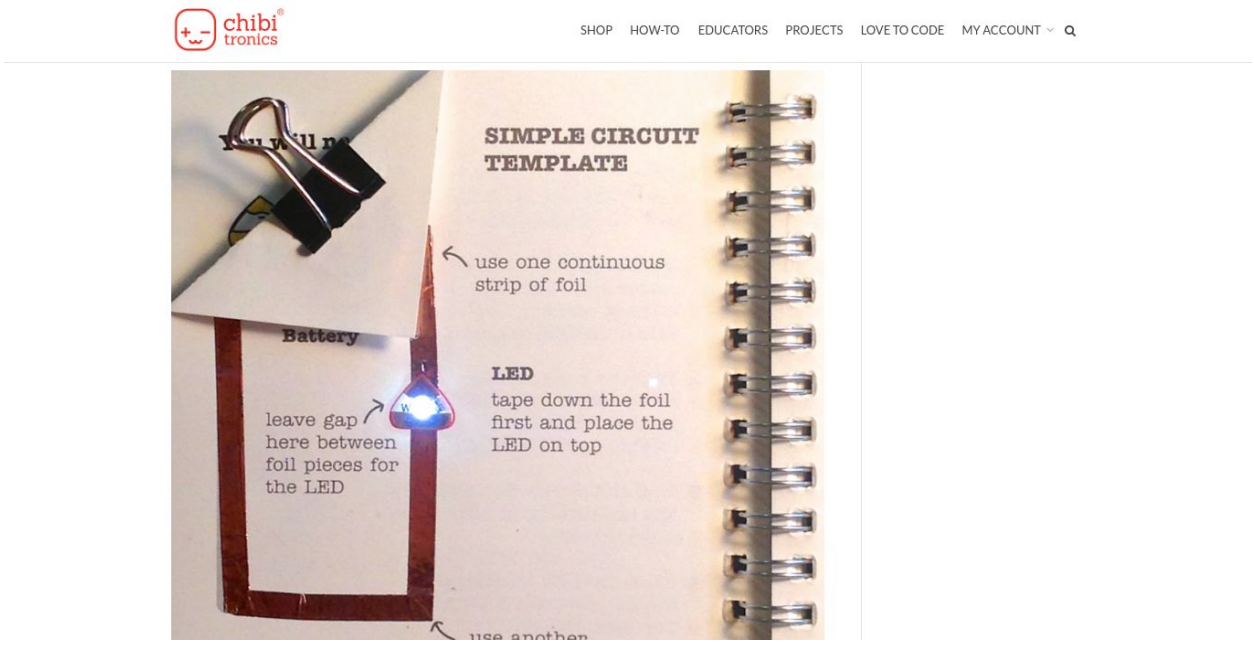
2. Once given approval, students are given 2 weeks at most to complete project to help prevent students from getting off task.

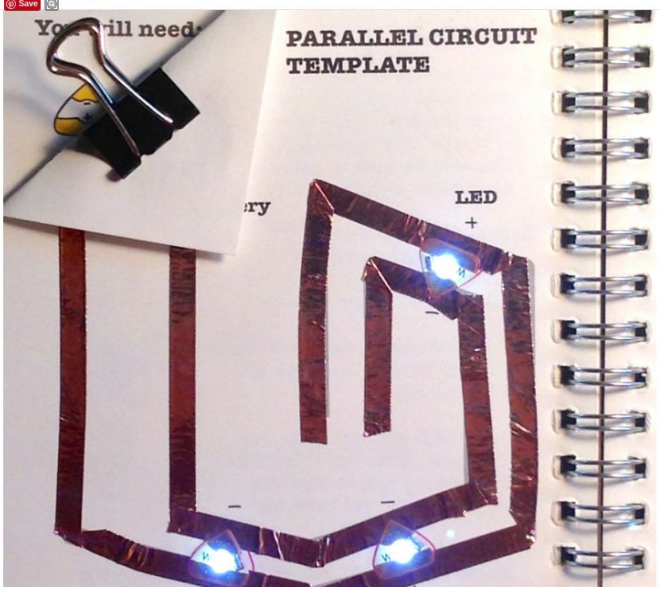
3. Once project is finished, students MUST upload to SeeSaw and use voice recorder to document how they created it.

4. Students must present to small group or whole class their final project.

Chibitronics:






PARALLEL CIRCUIT
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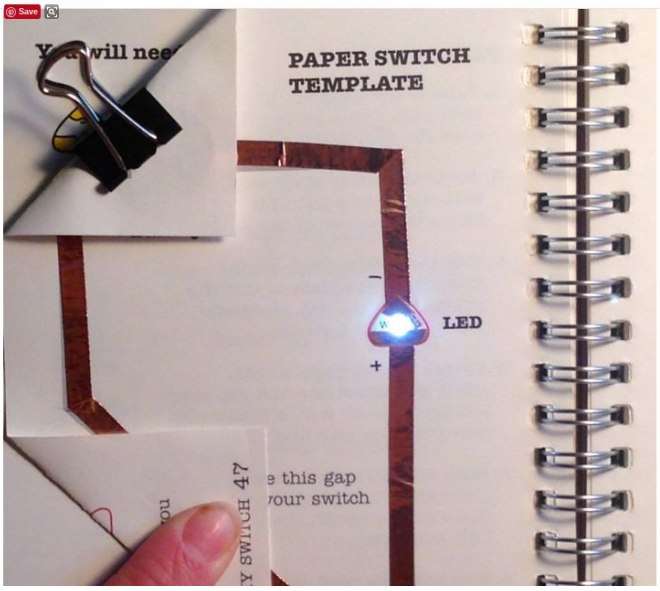
PAPER SWITCH
TEMPLATE
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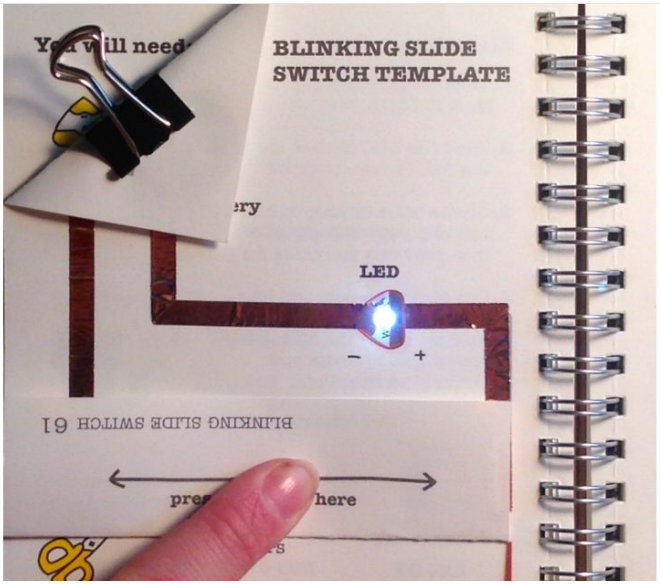
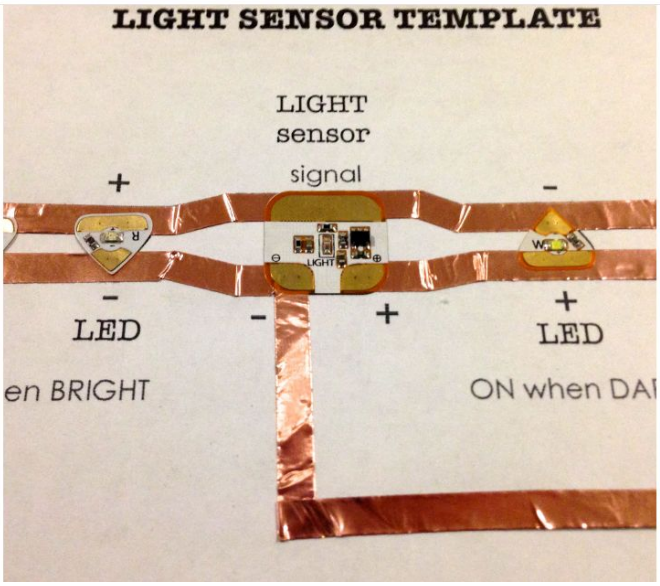

BLINKING SLIDE
SWITCH TEMPLATE
LED
BLINKING SLIDE SWITCH 61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LIGHT
sensor
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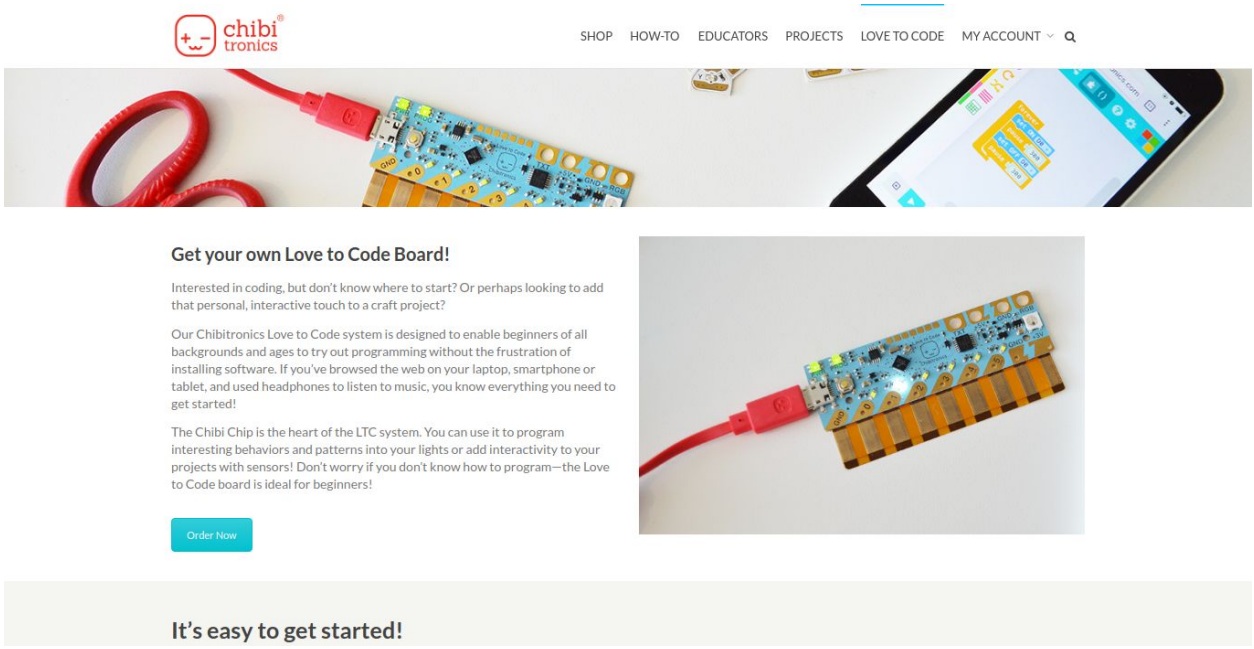

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