Makerspace Playbook Site Survey:
Tehama County Department of Education (TCDE)
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CONTACT INFORMATION

Name: Michelle Carlson
Title: Educational Technology Director

ORGANIZATION

Organization Name: Tehama County Department of Education (TCDE)
How would you describe your organization type (library, museum, school, community organization, etc.)? County office of education
Organization website: http://tehamaschools.org/
Organization social media links: @tehamaschools
Blog and/or site most related to programming, making:
http://tehamaschools.org/department/educational-technology/makerspace
Organization news/publicity links:
http://www.enjoymagazine.net/2015/02/23/62637/makerspace-brings-joy-back-into-the-classroom

Location (city, state): Red Bluff, Calif.

Is your organization rural, urban, or suburban? Rural

Is your space and/or elements of your programming mobile? Elaborate, if necessary.
Right now, we are operating out of a permanent space but are moving towards having a mobile element as well to best serve our entire student population.

Target audience(s): K–12

Percentage free and reduced lunch served (if known): Poverty is currently a fact of life in Tehama County. Of our 14 school districts, all but one very small district (enrollment of 14 children) qualify for federal Title I supplemental funding. Some districts serve a population with over 80% of their students qualifying for free/reduced lunch. Most districts also serve English Learners with a countywide English Learner percentage of 16%.

Access: Is your organization open to public, age restricted (elaborate below), membership-based, free, and/or admission required? Are there specific groups that you serve?
Our space is free and open to all Tehama County students. During the summer months, we will hold regular workshops led by community volunteers and may charge a small materials fee so that participants can leave with their created items (soap making, knitting, etc.).

Tell us about your organization. What distinguishes you from others?
The thing that distinguishes our program most from others I think is the rural location. We’ve seen many other amazing programs which operate in more urban settings and also have a different set of available resources. A lot of our students have never even been on the freeway, so to invite them into a space that has a very urban feel is something foreign to them. It’s a way to expand their thinking and to broaden their horizons. We hope that our space is the first in many new and great experiences for our youth.

MAKING AND CORE VALUES

What is your mission statement?
It is the mission of the Tehama County Department of Education to provide a world-class education for all students from early childhood to adulthood. The Department serves our community and region by collaborating with educators, schools, parents, and community partners. Together, as a team, we prepare students to live, work, and thrive in a highly connected world.

The mission of our makerspace is very much like the Maker Manifesto. 😊
What does it mean to “make” in your space/organization?
Making is a way to engage in joyful learning and exploration. To make is to be empowered. We want our kids to know that they can do anything they put their minds to and that we’re here to help them along their path.

How does the above relate (or not relate) to your core values?
We value community. It’s our hope that by bringing in the community and giving kids a connection to something greater than themselves, we can make the world a better place. Making is a way to build the future that we’d like to see.

What forms of making (all creative endeavors) occur?
Coding, videography, graphic design, electronics, art, engineering ... the list keeps growing 😊

What are some good examples of especially powerful/ambitious/successful making experiences?
Every time we have kids here, we have precious moments to savor! A couple specific stories are: Middle school girl who says she hates science: “When they told me we were going on a field trip about science, I thought, ‘Meh’. Then you let us DO STUFF! If science were like this every day, I would like science!”

We had a boy here the other day who recently lost both of his parents very tragically. He’s small, not athletic, quiet, struggling. He’s a 9th grader. He got to explore code for the first time in his life and he LOVED it! When his guardian picked him up, she said he talked all the way home. He said to her that he “enjoyed being able to explore and go at his own pace and wished all school was like that.” At the end of the conversation, he told her that he was going to go home and get on code.org and that he thought he now knew what he would like to do with his life.

In a moment, we can truly change lives. It’s why we do this work so passionately.

GOALS

What are the goals of the programming and experiences provided?
They are big! We would like to give kids experiences that give them hope, new beginnings, a reason to make good choices and to know that there are ways to learn that are joyful and meaningful. Many of our youth are struggling with challenges... from generational poverty to drug and gang issues. Even the ones who don’t struggle with these things often struggle with finding meaning in “regular school”. The Makerspace provides another avenue to access STEM and the arts that are extremely student centered.

How do your environment, tools, and materials reflect these goals?
We have a welcoming environment that’s full of tools to support diverse interests and abilities. No matter who you are, you can find something to work on that’s interesting and a place to do the work that meets your personal learning needs.
How do you know when you’ve met your goals? What are your metrics of success?
Many of our metrics right now are qualitative. Student feedback, both on the day of the event and sometimes even continuing into the weeks after an event, let us know what their experience was. Quantitatively, we record every single student visit, and the numbers continue to increase every month. When we have, for example, an incarcerated student trying to make better choices so they can come back to the makerspace to work, we know we’ve done something pretty special.

What are your plans and hopes for the future of your space and programming?
We would like to continue to grow the space, both in activities offered and in how many students we can serve each day. By having some activities that are mobile and another facilitator to lead activities, we can more than triple our impact.

**TOOLS**

What are your most frequently used and commonly available tools?
Gosh, we use a lot of different tools as we have a pretty wide array of activities.

List any special tools that require supervision, training, and/or certification.
Soldering irons, heat guns

What are the favorite tools (most popular/most desired, even if you don’t have many)?
The Macs in our design studio are the things that students naturally gravitate to most. They are loaded with the full suite of Adobe software and are used to create graphics, videos, and animation mostly.

Are there any tools that go largely un-used, or that are no longer provided? Reasons?
Not really at this point. We were pretty frugal with our initial purchase and tried to be very thoughtful about what would be most easily accessed for both kids and presenters. Everything we have gets used pretty heavily.

**MATERIALS**

What are some of the most popular, and frequently used materials?
Most popular are the digital sandboxes, LED lights, copper tape, Sharpie markers.

What are the most continually reused materials? Most consumed?
Reused would be the digital sandboxes; consumed would be the copper tape.

Share any specific or general sources for materials.
https://www.sparkfun.com/products/12651

**COLLABORATION**

What are some of the institutions and organizations that are sources of inspiration, support and influence?
We have received GREAT support from Maker Ed – THANK YOU!!!! The Making Possibilities Workshop was a huge source of initial inspiration. Also, the Bay Area Maker Ed Meetup group has been so helpful, nice, and inspirational. Being up here in Tehama County, these folks have given us a way to get out of our bubble and see what the rest of the world does with making.

Describe any local, national, and global partnerships and collaborations.
We are a Maker Corps Host Site this year. Being so new (we just opened in January), we are still getting our bearings with all of this and looking forward to more ways to connect and support the movement.

SPACES AND ENVIRONMENT

In what physical places does making happen in your organization? A single dedicated space, multiple dedicated spaces, general use areas, a workshop (metal, wood, sewing, etc), outdoors, a theater, a music studio, an art studio? Everywhere? Somewhere else?
Right now, a single dedicated space. We are in the process of helping schools to bring making into the classroom though. It’s our hope that making can happen anywhere with the right support and encouragement.

How are the spaces, tools, and materials organized?
We love to have a space that can be used by more than one person, so organization is important. We were very lucky to have an AB 109 crew create some very beautiful and functional floor-to-ceiling locking cabinets for us to store everything. There’s a place for everything, and everything is in its place.

How large is the space(s) where making happens? ~1600 sq. ft.

Please describe how your site and maker space(s) are staffed, including numbers of full and part-time staff and volunteers.
We have two part time people (myself and Syerra) who have added this to our existing jobs at TCDE. Additionally, we have several staff in the organization who love to be a part of it and help out whenever they can.

For student volunteers, we just started a program for teens called the Makerspace Ambassador program. We currently have four volunteers from the local high school who spend a few days per week here creating their own passion projects and helping us with ours.

As we grow, we are finding that more and more people are engaging in this work and are gaining many more community volunteers every day.

First impressions of space(s):
Ideally, when participants first enter the Makerspace, they think, “Wow, am I still in Tehama County?!” They hear their own creative voice come alive. They feel inspired and empowered. They experience something they’ve never experienced before. They leave with the knowledge that they can dream of a bright future and that we will help them get there.
Describe your approaches and priorities in creating environments for making/learning. The environment was really important to us because we wanted it to serve as a catalyst here in our rural county. It has to be inspiring, functional, and different than the “norm.”

**PROGRAMMING**

How do you decide on/design/make possible the space and components of the program? LOTS of volunteer work, support from our County Superintendent of Schools and the rockstar maintenance department here at TCDE.

How has your environment and programming evolved? What has worked well, and why? What has changed? What could still be improved?
Being in this only three months so far, we haven’t had lots of time to evolve just yet, but every day we learn new things and are able to add more to our repertoire. Every day we reflect and improve.

**EQUITY AND ACCESSIBILITY**

Are there segments of the population that you hope to serve better?
Yes, there are geographical challenges for some of the schools, and being smaller, they don’t have as much budget for field trips. The mobile activities and additional staff will improve access tremendously.

What strategies do you employ to help increase the accessibility of your space/program to all learners?
We have a diverse group of folks who we rely on heavily to ensure that we are providing the best services to all students. Different ages, backgrounds, and abilities means we need lots of support to make sure what we’re doing is relevant to the audience.

What has worked well? What has been the greatest challenge?
We’re really blessed that pretty much everything we’ve decided to do has gone pretty well so far. The greatest challenge is staffing due to financial challenges.