MOBILE MAKERSPACE

INITIATIVE:

STEAM FOR ALL ON A RELATIVE DIME!

tiny.cc/mobilemakerspace
HELLO!

We’re the Digital Learning Department – Bastrop ISD
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WHAT IS A MAKERSPACE?
would you rate your understanding and experience with the #maker movement?

0 - The Maker what?

1 - I've heard of it, but I don't know much about it

2 - I could tell you about what it is, but I've never done anything #Maker with students before

3 - I've dabbled in the Maker movement, but I wouldn't consider myself an expert

4 - I'm an expert in all things #Maker!

Start the presentation to activate live content
If you see this message in presentation mode, install the add-in or get help at PollEv.com/app
"A MAKERSPACE IS A PLACE WHERE STUDENTS CAN GATHER TO CREATE, INVENT, Tinker, EXPLORE AND DISCOVER USING A VARIETY OF TOOLS AND MATERIALS."

DIANA RENDINA
OK, SO WHAT IS THE PROBLEM?
A WELL-EQUIPPED MAKERSPACE TAKES CONSIDERABLE TIME, SPACE, AND USUALLY MONEY.

And we all know how much extra time, space, and money schools have...
The following, which is the main reason you have implement this in your curriculum?

- I don't know enough about it or didn't have any interest
- I don't have the resources
- I don't have the space
- I don't have the time to properly plan to integrate it
- I don't have the support (administrative, curricular, etc.)
Our Solution: Mobile Makerspace Kits!

Digital Learning and Makerspace kits that can be checked out by campuses for 2–3 weeks at a time.

Campuses receive training, tech support, instructional support, and curriculum to ease integration.

Allows test drive before they buy, and it keeps them from having to purchase something that they might only use for short spans that do not justify the costs.

Sometimes campuses get hooked and decide to find the funding to purchase their own kit for their campus.
Campuses can create centralized kits that are managed and distributed by the Library or an Instructional Coach/Specialist. Or it could be a club that collects materials and promotes all things #Maker! Departments, PLCs, or even individual classrooms can also create their own shared bank of resources.
Our Kits:

Robotics Kit (Spheros, Dash & Dot, Ozo Bots/Evos), Osmo iPad Kit, Engineering Kit (MakeyMakeys, Arduino, littleBits), 360 Degree Camera Kit (Ricoh Theta Cameras), Green Screen Kit (Green Screen, Video Camera, Tripods), Drone Kit, Google Expeditions Kit, LEGOS Kit, 3D Printing Kit, 3D Drawing Kit (3Doodler Classroom Kits).
Fill out this form as we go & you will leave with a personalized plan of action!

tiny.cc/makerplan
THINGS TO CONSIDER:

- **Who is your audience?** (grade, subject, after school programs, etc.?)
- **What are your objectives and goals?** (STEAM focus, 5 Cs development, integration of maker principles into day-to-day curriculum, etc.)
- **What are your needs?** (How many people will you need to serve, what resources do you currently have, what is the anticipated popularity of different resources, etc.)
- **What is your sustainability plan?** (If resources require consumable materials, how will you ensure those materials are maintained and replenished?)
FINDING FUNDING

So how do we find funding to create awesome Makerspaces full of engaging resources?!
**SOME IDEAS**

**Crowdfunding & Donations**
Double check your district policy on this, but you can also try to fund different resources through crowdfunding sites or by asking for donations from the community or directly from companies. Hardware stores (like Home Depot and Lowes) tend to be very generous in providing Makerspace materials!

**Grants**
Apply for lots of them. Get on [https://www.getedfunding.com](https://www.getedfunding.com) and search for relevant grants, and just make it a habit of applying for one every few months. If you have a district Education Foundation, they’re a good place to hit up also! And PTAs at the campus level!

**End of Year Funds**
Some of our kits were put together from the remnants of our budget at the end of the fiscal year. You’d be surprised how far a few hundred dollars can go.
Conference and Workshop giveaways:

We’ve received Bloxels, a 3D Printer, LEGO’s, etc. from various conference and workshop giveaways!*

*Perhaps you’ll leave with something today!
Our Funding

- We purchase consumable supplies with End of Year leftover fiscal funds (like filament for our 3D printer, plastic for the 3Doodler pens, USB charging cords that might go missing, etc.), and sometimes it’s a larger chunk of money that lets us expand our kits.
- We received ~$10k in grants during the 2016-17 school year, and helped three different campuses get a total of ~$30k in grants during that same year. (It never hurts to help others get their own materials!)
- We partnered with our community Lowes to create our Mobile Makerspace project for 2017-18. They donated the supplies we asked for, and we supplement with our budget as needed.
WHAT'S NEXT?
**Best Practices**

- Requests are processed by department or admin assistant (if available), including emailing requesters and key campus reps, and once confirmed, adding kits to our Google Calendar.
- Training is required before kit will be released to campus.
- Kit is checked out to campus, not individual teacher(s), and must be held centrally (usually in the Library) except in rare circumstances.
- Trusted campus rep and/or Digital Learning rep confirms inventory and material status prior to kit being sent to next destination.
- Goal is to have interoffice mail deliver kits from place to place instead of our Specialists delivering everything, but that doesn’t always happen.
- Have a plan for checkout roll out, and bring kits back in before the last couple weeks of school for inventorying purposes.
SOME HELPFUL DOCUMENTS

- Google Form for Checkout (makes a copy)
- General Procedures Walkthrough Document
- Information & Curriculum for Checkout Kits
Once you have a centralized system working well, you can start using the same process to provide more resources to more campuses/classrooms/individuals. Often we’ve found that the centralized kits inspire others to develop their own personal resources.
QUESTIONS?
THANKS!

Any questions?
Please reach out on Twitter or email ebain@bisdtx.org!