

# The Makerspace Chromebook



**Josh Ajima**

**DesignMakeTeach.com**



# Bell Ringer

Describe your Makerspace and what you want to do with Chromebooks.

Share

-with the person next to you and/or

<https://padlet.com/designmaketeach/n2s3urdy1hkb>



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# Goal

Learn how to use the Chromebook as an essential tool in the makerspace.

- 2D and 3D design

- 3D printing

- programming/physical computing

- sharing/documentation

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# Chromebook Demo Slam

Give a 90 sec. demo to the  
group of a Makerspace  
Chromebook tool/tip/application.

Physical Computing Prize!!!

# HANDOUTS & CONTACT INFO



[DesignMakeTeach.com/TCEA](https://DesignMakeTeach.com/TCEA)

**Josh Ajima**

**@DesignMakeTeach**

**DesignMakeTeach.com**

**[youtube.com/designmaketeach](https://youtube.com/designmaketeach)**



# FEATURED PRESENTER



## **Digital Fabrication in the Classroom**

**Mon, February 5th, 8:00 AM – 11:00 AM, 9C**

## **Scaling Up the Makerspace**

**Mon, February 5th, 3:30 PM – 4:30 PM, Ballroom E**

## **The Maker Mindset**

**Tue, February 6th, 9:45 AM – 10:45 AM, Ballroom F**

## **Making with Head, Hands, and Heart**

**Tue, February 6th, 11:30 AM – 1:00 PM, 6B**

## **The Makerspace Chromebook**

**Wed, February 7th, 8:00 AM – 11:00 AM, 10A**

## **3D Printing Projects That Matter**

**Wed, February 7th, 3:30 PM – 5:00 PM, 9A**

# EDUCATOR



**Instructional Facilitator for Technology**  
**-Dominion High School & Loudoun Academy of Science, Sterling, VA (2003-present)**

**Director of Instructional Technology**  
**-Clarke County, VA(1998-2003)**

**Teacher: Chemistry, 7th Life Science, 8th Physical Science, Cisco Networking**  
**-Clarke County, VA (1996-1998)**



# MAKER



**Make Magazine Review Team  
2014 & 2015**

**Featured: Thingiverse,  
Pinshape, Adafruit**

**World Maker Faire NY: Best  
in Class Ribbon**

**Outsider Art Fair NY: Tower  
Design Competition - 2nd  
Place**



# MAKER EDUCATOR

CTE MAKEOVER  
CHALLENGE



**Construct<sub>3D</sub>**  
3D PRINTING & DIGITAL FABRICATION FOR EDUCATION



## Top Educational Model

The Top Educational Model Award goes to **DesignMakeTeach** for his design, Hidden Figures. This model integrates a number of educational concepts, including 3D modeling and the physics involved with light opacity. Congratulations and we hope the Wacom Cintiq and Adafruit and 3D Hubs gift cards help you continue your inspirational work!

US Department of Education's CTE  
Makeover Challenge Winner

Stanford FabLearn Fellow

Formlabs 3D Design Awards -Top  
Educational Model

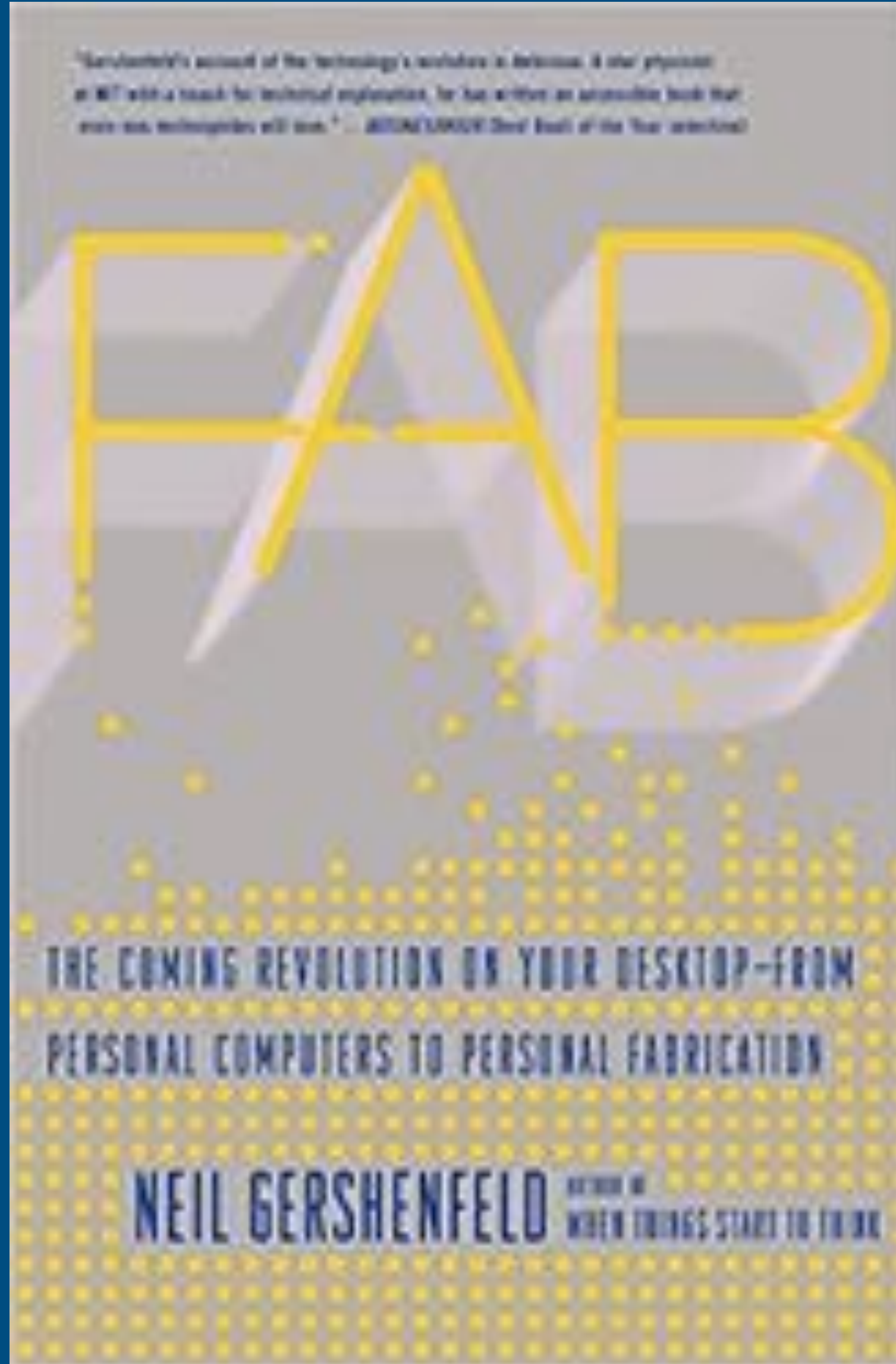
Construct3D 2017 - K12 Program Chair

VSTE Innovative Educator of the Year

Josh Ajima - [DesignMakeTeach.com](http://DesignMakeTeach.com)



# MY MAKER JOURNEY



## Neil Gershenfeld: MIT Center for Bits and Atoms

-2005 NSBA Conference

-How to Make (almost) Anything

-Personal Fabrication

-FabLabs

# UNIVERSAL DESIGN FOR LEARNING

- Multiple Means of Engagement
- Multiple Means of Representation
- Multiple Means of Action & Expression



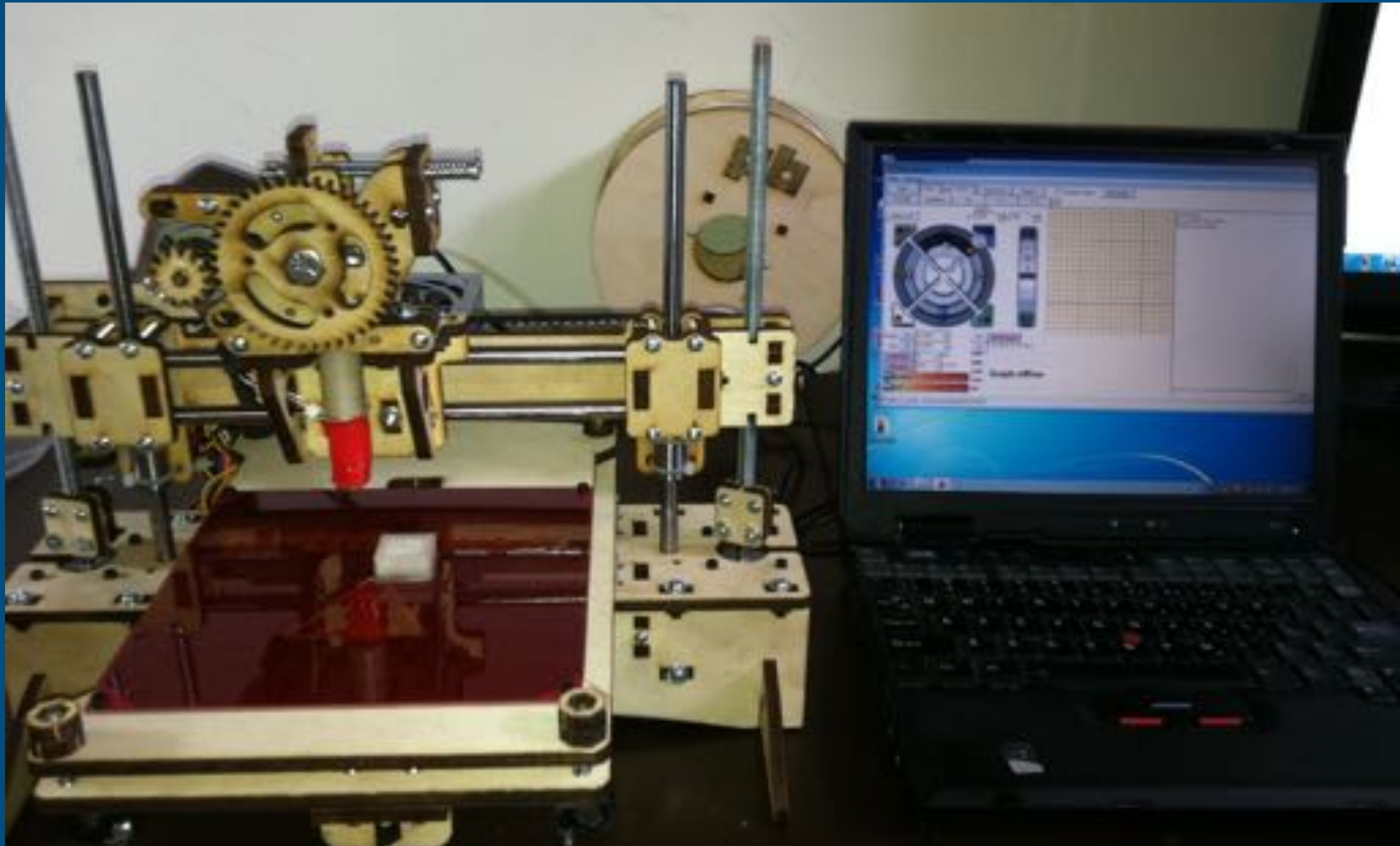


# A MAKER EDUCATION MODEL





# PERSONAL INVESTMENT



Josh Ajima - [DesignMakeTeach.com](http://DesignMakeTeach.com)

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# Why Chromebooks?



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**Providing students with a  
Chromebook rather than a proper  
laptop computer is akin to replacing  
your school orchestra instruments  
with kazooos.**

**-Gary S. Stager**

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**a huge amount of Chromebook use is  
being spent on educationally  
questionable video games, low level  
assessments, and YouTube**

**-Andy Losik**

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# Why Chromebooks?





Still probably  
need a PC/MAC  
in the Makerspace

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# Maker Project Chaos



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# Learning



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# Repositories

## 2D/3D Design

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# 2D/3D Design

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# Coding

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# Physical Computing



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# Demo Slam

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# Sharing

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# Provide Your Feedback

Remember to evaluate my session!

Complete this session's survey within the event in the TCEA Mobile App or visit [www.tcea.org/surveys](http://www.tcea.org/surveys).