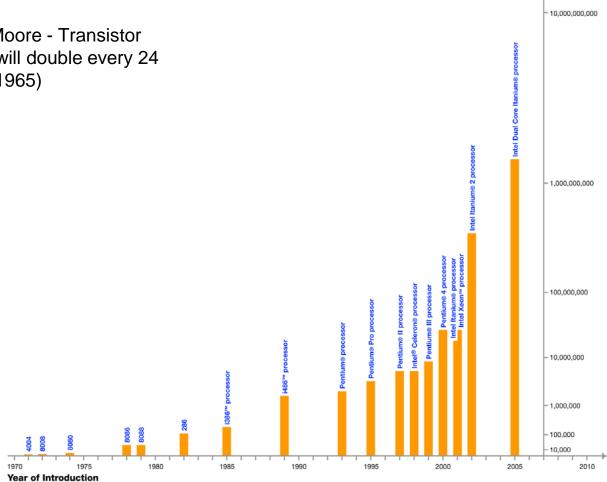
Steam, Makerspace, and PBL...Oh My!

Derek Reinhardt @ReinhardtDerek
Brent Kerr @brent_kerr1
Amanda Buethe @AmandaBuethe
Megan Albers @meganrose11
@usd303

Modern Classroom Video

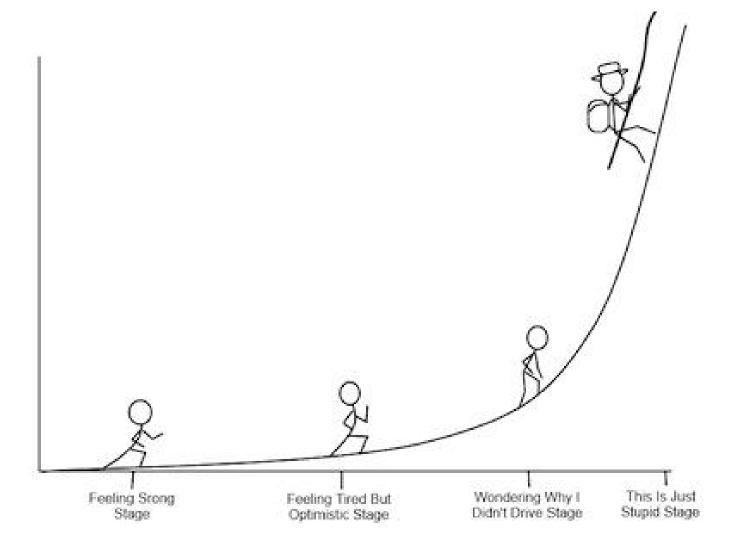
	•	••	• •	• •	• • • • • • • • • • • • • • • • • • •	2		128
Andrew McAfee	256	512	1024	2048	4096	8192	16384	32768
	65536	131K	262K	524K	1 M	2M	4 M	8M
	16M	33M	67M	134M	268M	536M	1G	2G
	4G	8G	17G	34G	68G	137G	274G	549G
	1T	2T	4T	8T	17T	35T	70T	140T
	281T	562T	1P	2P	4P	9P	18P	36P
	72P	144P	288P	576P	1E	2E	4E	9E

Gordon Moore - Transistor capacity will double every 24 months (1965)



Transistors*

"Note: Vertical scale of chart not proportional to actual Transistor count.





Top 10 skills

in 2020

- 1. Complex Problem Solving
- 2. Critical Thinking
- 3. Creativity
- 4. People Management
- Coordinating with Others
- 6. Emotional Intelligence
- Judgment and Decision Making
- 8. Service Orientation
- 9. Negotiation
- 10. Cognitive Flexibility

in 2015

- Complex Problem Solving
- 2. Coordinating with Others
- 3. People Management
- Critical Thinking
- Negotiation
- 6. Quality Control
- Service Orientation
- 8. Judgment and Decision Making
- 9. Active Listening
- Creativity





Jobs

Foxconn - 10th largest employer in the world

- Replaced 60,000 workers with robots

Walmart - 3rd largest employer in the world

- Working to replace all warehouse stock-checkers with robots/drones

DoD - Largest employer in the world

- Currently over 7,000 unmanned vehicles and growing

Belief is 77% of all Chinese jobs could be replaced with Robots

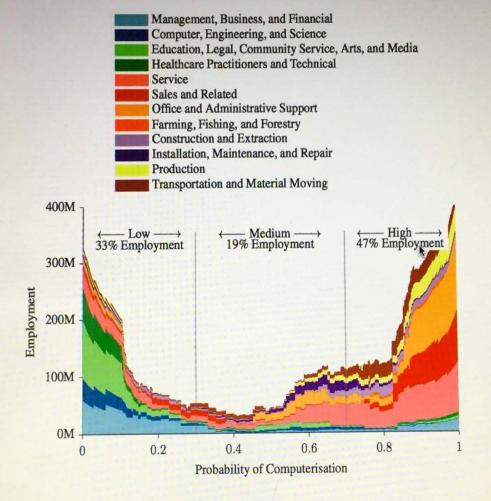
Oscar Williams-Grut "Business Insider"

Jobs

Oxford University Study

Jobs at risk of being replaced by robots/automation

- Loan Officer
- 2. Receptionists
- 3. Paralegals
- 4. Retail Salesperson
- 5. Taxi Drivers, Chauffeurs, Truck Drivers
- 6. Security Guards
- 7. Cooks, Fast Food
- 8. Bartenders



Oxford University Study

Michael Priddis "Al is a Social Revolution not a Technology Invasion"

Raison d etre

Reason for Being

Why does your school (classroom) exist?

Old School - Pass the same tests, Get over the same bar, "Prepared 4 life"

Today - Can educate yourself

- Motivation to be curious, engaged, and connected
- Learn, Unlearn, Learn Again
- Not differently, but something different

Failure Must Be an Option

And

We Must Challenge the Status Quo

Thought Provokers

Michael Priddis

Andrew McAffee

Ron Berger

Alan November

Simon Sinek

STEM----PBL---Maker

It's a mindset.

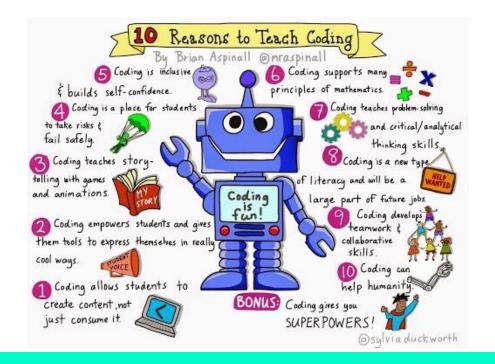
Learn more about Computational Thinking Mindset by following omnore omnore-red omno

Learn more about #FailureFriday by following @mlauer4

our Projects

Codin

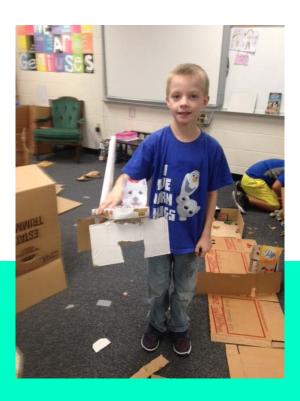
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Parrot Drone, Sphero, Tynker, Hour of Code

Cardboard









Growing Entrepreneurs











Brent Kerr
Follow me on Twitter
@Brent_Kerr1



Godium 2.0
Follow Godium 2.0
On twitter
@Gogodium or
@NCHSentp

- Pushes our students to think real world.
- Gives students an active role in their education.
 - Reaches students of all types.
 - Covers all basic academic subjects and more.
- It is where education is headed, don't fall behind.

Why Should I do This?

Find someone who needs a product, Be your Student's Customer, Reach out on Social media for someone who has a problem needing solved, If your students have a passion let them develop their own product.

If interested in a challenge contact @Kevinhoneycutt

The Short of Entrepreneur class

- Have Students Develop a prototype or a model for proof of concept.
- Develop a business plan
- Develop marketing strategies

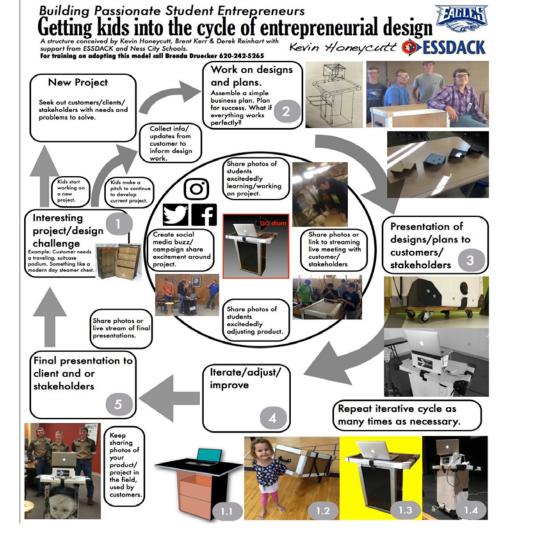
Develop a product and prototype

- Deliver Proof of concept model or prototype to customer
- Allow customer to test prototype or proof of concept model
- Make sure students are ready for Criticism
- Make sure students are taking notes of products short falls
- This requires customer to give them feedback

Deliver Product and Test Product

- Get creative with iteration on prototype
- Make necessary changes to prototype
- Once students believe their prototype is ready for production, put their product on the market.
- Market, Market
- Build a website, use social media to promote the product.

Iterate, and Market



- Calculated risk taking
- Evidence based decision making
- Persistence
- Self-Direction
- Tolerance for ambiguity

5 Areas I saw student growth

Product research, product development, developing a business plan, marketing, marketing with social media, developing a budget, budgeting, web design & development, analytics, product testing, branding, working with a tremendous amount of different materials

Other learning we didn't cover that goes on



Parents perspective

Questions?