WELCOME

Please complete the prompt:

I think blockchain is...
Exploring Emerging Technology*

*We are digging into blockchain
Value

Worth

fair and suitable equality, desirability, utility or being useful or desirable.
Think about a moment when you learned something that was really valuable to you.

Why was it valuable to you? What did it feel like?
Build a prototype of your partner’s value
Seek voices that are intentionally left out.
The K12 Lab aims to obliterate opportunity gaps in education by designing new, more equitable models and sharing design approaches with students and educators.
We do experiments on juicy questions.
How might we measure crucial student competencies—such as collaborative problem solving—in engaging and relevant ways that provide immediate feedback for improvement?
Director, Center for Innovation and Entrepreneurial Thinking
How might we influence and utilize emerging technology in K12 education?
Invitations

Embrace Ambiguity
Step up, step back (share the air)
Listen to understand
Learning Aspirations

~Develop a language and baseline understanding around blockchain

~Apply your understanding of blockchain to an educational design challenge
Today’s Arc

- Immersive Blockchain Stoke
- Blockchain examples!
- Building your first block!
- Blockchain Design Challenge + Exhibition!
BLOCKCHAIN IS...WHAT?
A little bit about design...

Everything is connected.
A little bit about design...

Everything is connected.
Navigate Ambiguity

Synthesize Information

Learn from others (People and Contexts)

Experiment Rapidly

Build and Craft Intentionally

Communicate Deliberately

Design your Design Work

Move Between Abstract and Concrete

Experiment Rapidly
Synthesize Information
Learn from others (People and Contexts)

Navigate Ambiguity
Build and Craft Intentionally
Communicate Deliberately

Design your Design Work
Move Between Abstract and Concrete
Experiment Rapidly
BLOCKCHAIN IS... WHAT?
Computer code.

Computer code where records of things are linked together.

Computer code that enables our systems to run in a distributed way.
Blockchain through beats

Centralized

Decentralized
Let’s try on a couple systems:

**Centralized**
- Only one person can see all the hopes and dreams.
- One person chooses the rules and chooses who can play but it’s not clear how.
- Some people have easier access to the decider.
- Vulnerable to hacking.
- Decisions can be made quickly.
- All the information in one place so it’s easy to prioritize and make hopes and dreams come true.

**Distributed**
- Multiple copies of hopes and dreams with multiple people.
- All the data is transparent for everyone.
- Anyone can participate without central permission needed.
- Rules are standardized and the same for everyone.
- An attack doesn’t take down the system and it is tamper-proof.
- Not a place for decision making...

These might all be pros or cons.
BLOCKCHAIN IS...
WHAT?

Blockchain is the computer code that enables distributed systems.
BLOCKCHAIN IS...
WHAT?

...and what can it do?
Supply chains + food safety:

IBM + Walmart
Healthcare:

Medicalchain

Own Your Health
Be part of Medicalchain's pilots

Register as a Patient ➔
Register as a Practitioner ➔

SimplyVital

[Image with infographic elements]
Civil is the decentralized marketplace for sustainable journalism.

Our mission is to help power sustainable journalism throughout the world. To do so, we’re employing a decentralized model based on blockchain and cryptoeconomics.
Education is the New Gold Standard
BLOCKCHAIN IS...
WHAT?

...and what can it do?

...and how does it work?
Makes lots of copies of every transaction.

Gives a copy to everyone in the system every time.

Uses cryptography to guard against fraud.
BLOCKCHAIN IS... WHAT?

...and what can it do? ...so what systems should it affect?

...and how does it work? ...we’re still learning.

WE NEED EVERYONE WORKING ON THIS.

What systems are in your life?
How might we use blockchain to make the college admissions process more transparent and equitable?
WELCOME (back)

Sit with a group of 4 to 5 people!

we are glad you are back!
Let’s warm up by deconstructing the system behind a product.
My First Blockchain

In this exercise, we will deconstruct a system that exists today (like getting beef from a farm to a diner’s plate at a restaurant) and reimagine parts of that system that could be disrupted by blockchain.

(1) Pick a system.
Use one of these if it’s your first time doing this:

- SOLAR POWER
- FREE RANGE BEEF
- SHIRTS AT THE GAP
- REPORTING THE NEWS
LET’S DEBRIEF
Let's take a break
What does this mean for education?
What are the centralized systems within education?

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- Not a place for decision making...

*these can be pro or cons*
How might we use blockchain to make the college admissions process more transparent and equitable?
User Experience Blockchain

My user is
This record is part of one block.
Reflections

As a group add to your board:
I used to think...
Now I think...
Exhibition!

With your board, your group will share:

Wonderings + Learnings

The records you chose to bring into the new distributed system

Stakeholder maps

*one activity you might want to do with group*
LET’S DEBRIEF
Thank You.

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