



# Amplify Oshkosh Modernize Change

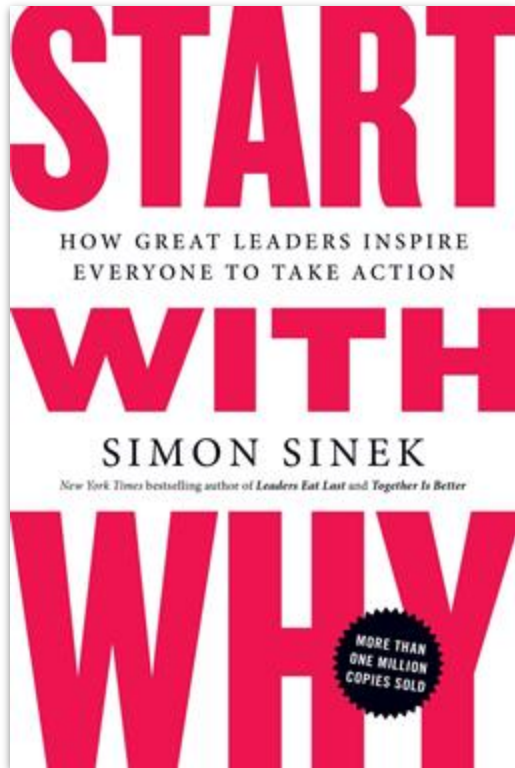
OASD Changes and Challenges  
(Past, Present, and Future)

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@davidgundlach



# The Golden Circle

**WHY**

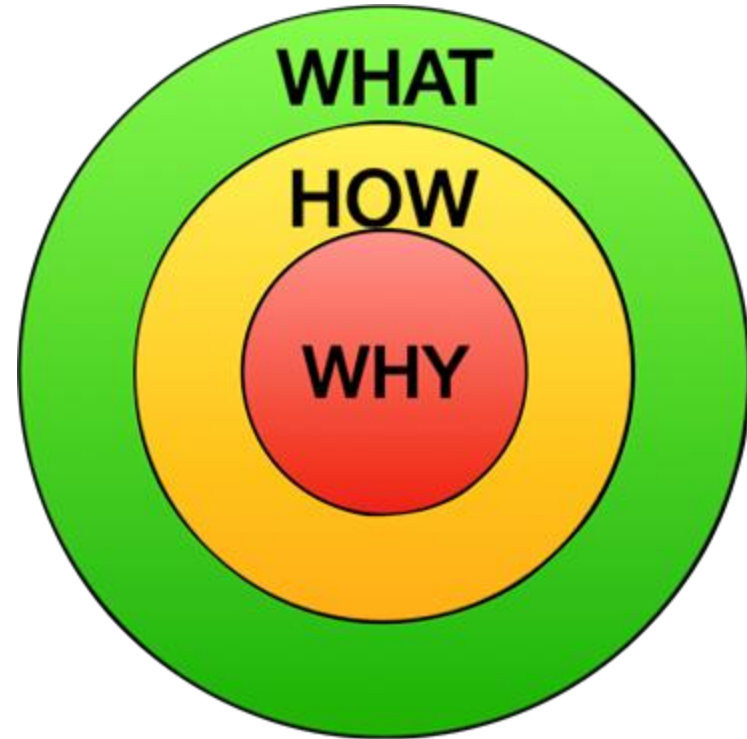
The Purpose

**HOW**

The Process

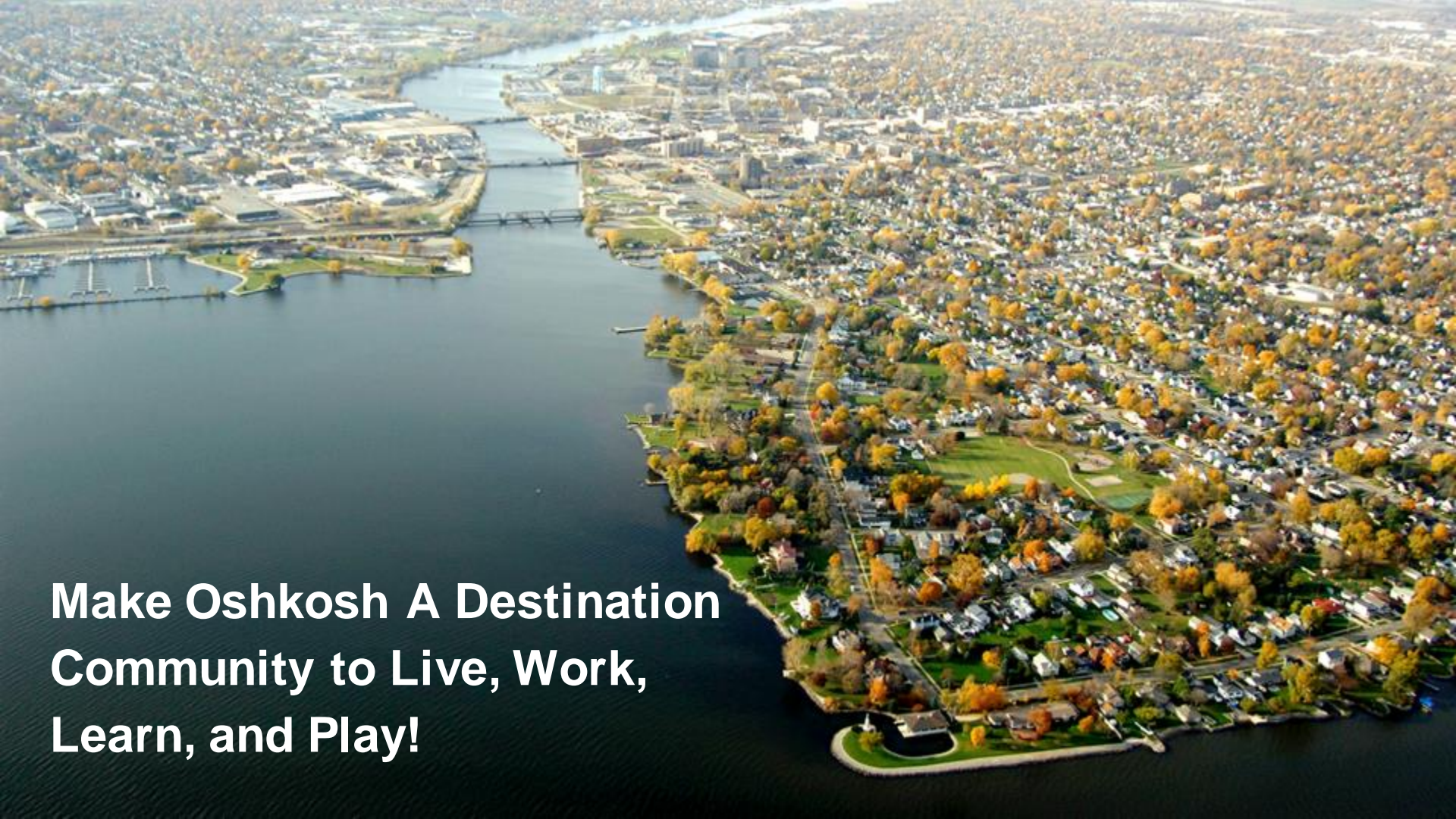
**WHAT**

The Results



**FUTURE**





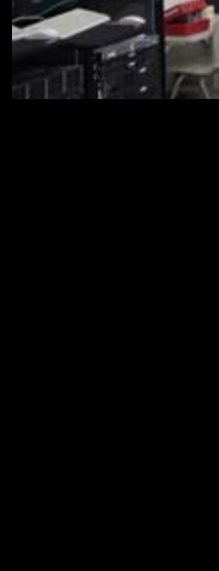
**Make Oshkosh A Destination  
Community to Live, Work,  
Learn, and Play!**



# The Past

# OASD Challenging Past

- District severely under-resourced in all areas especially Technology
- No technology leadership for 2 years
- Technology “optional” and unsupported
- Frequent outages led to limited student use and frustration
- Computer lab and isolated vs. embedded into instruction
- 100+ year old facilities with \$116 Million in facility repairs
- District and community not communicating
- Enduring perception/reality gap



# Technology Optional Education







# Ubiquitous Computing

**“As reliable as  
the lights”**





# The Present

# Rapid Infrastructure Improvements



# Learning Without Limits Initiative - Staff



# Learning Without Limits Initiative - Staff



# Learning Without Limits Initiative - Grade 9-12



# Learning Without Limits Initiative - Grade 6-8





# Learning Without Limits Initiative - Grade K-5



# Learning without Limits

ROUND

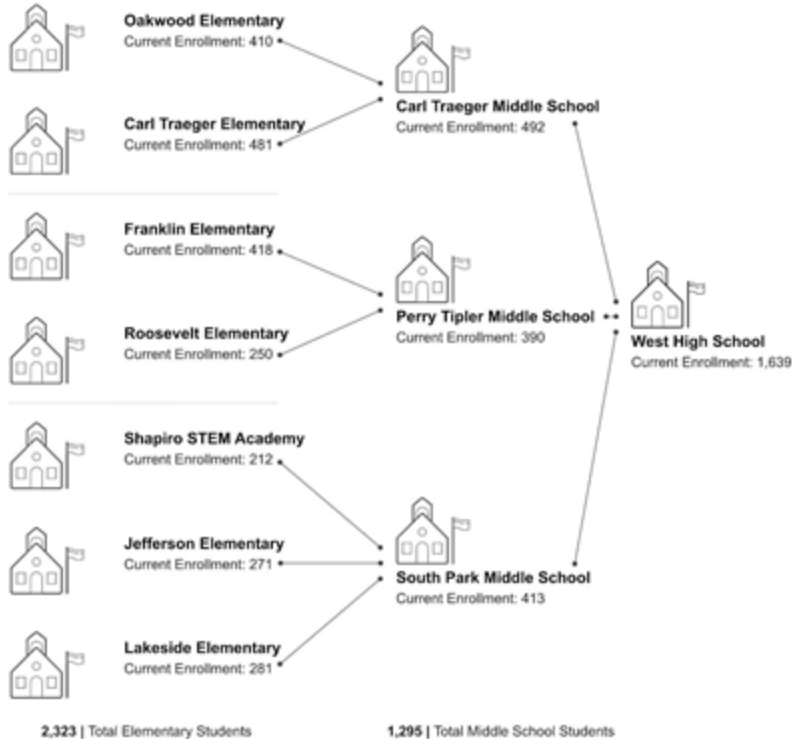
3

## 4 Phases - 3 Rounds - 3 Referenda

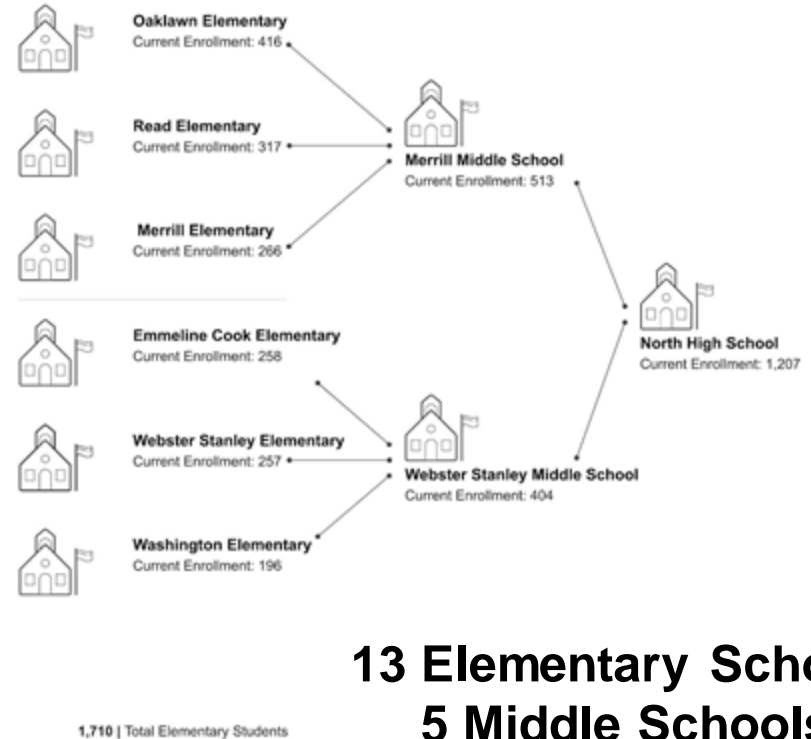
	Description	Round 1	Round 2	Round 3
Phase 1	State of the art infrastructure	13-14	17-18	21-22
Phase 2	Embedded PD (IST-TI)	14-15		
<b>Phase 3</b>	<b>Provide staff with technology</b>	<b>14-15</b>	<b>18-19</b>	<b>22-23</b>
Phase 4	Provide students with technology <ul style="list-style-type: none"><li>● Grades 9-12</li><li>● Grades 6-8</li><li>● Grades K-5</li></ul>	15-16 16-17 17-18	19-20 20-21 21-22	23-24 24-25 25-26

# OASD Facilities through 2022-23 (20 Schools)

## WEST DISTRICT ORGANIZATION CHART



## NORTH DISTRICT ORGANIZATION CHART



**13 Elementary Schools**  
**5 Middle Schools**  
**2 High Schools**  
**Multiple 4K sites**

# Phase 1: OASD Future Ready Schools



**Vel Phillips MS**  
**Open Fall 23**



**Webster Middle**



**Vel Phillips MS**  
**Open Fall 23**

**Webster Middle**



**Webster Middle**



**Webster Elementary**  
**NEW Elementary**  
**Open Fall 24**



**Webster Elementary**



**EW Elementary**  
**Open Fall 24**



**Washington Elementary**

**5 Sch** | **2 Schools on 2 Sites**

# Vel Phillips Middle School



# Menominee Elementary School



# Future Look - Post Phase 1 (17 schools)

district-owned property + boundaries map post phase 1

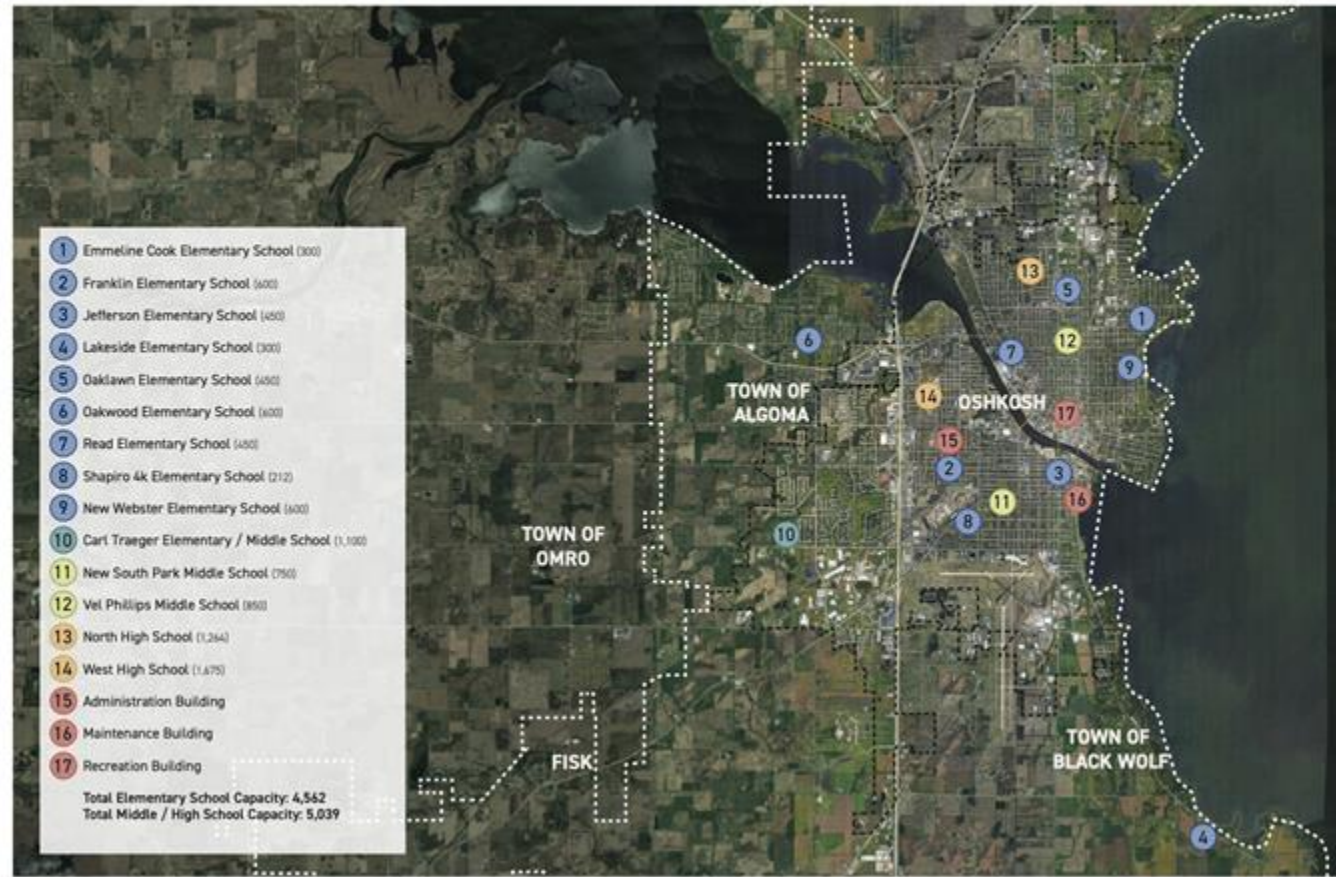
**11 Elementary Schools**  
**4 Middle Schools**  
**2 High Schools**  
**Multiple 4K sites**



# Future Look - Post Phase 2 (15 schools)

district-owned property + boundaries map post phase 2

**1 4K Center**  
**9 Elementary Schools**  
**3 Middle Schools**  
**2 High Schools**







# Unexpected Challenges



# COVID-19

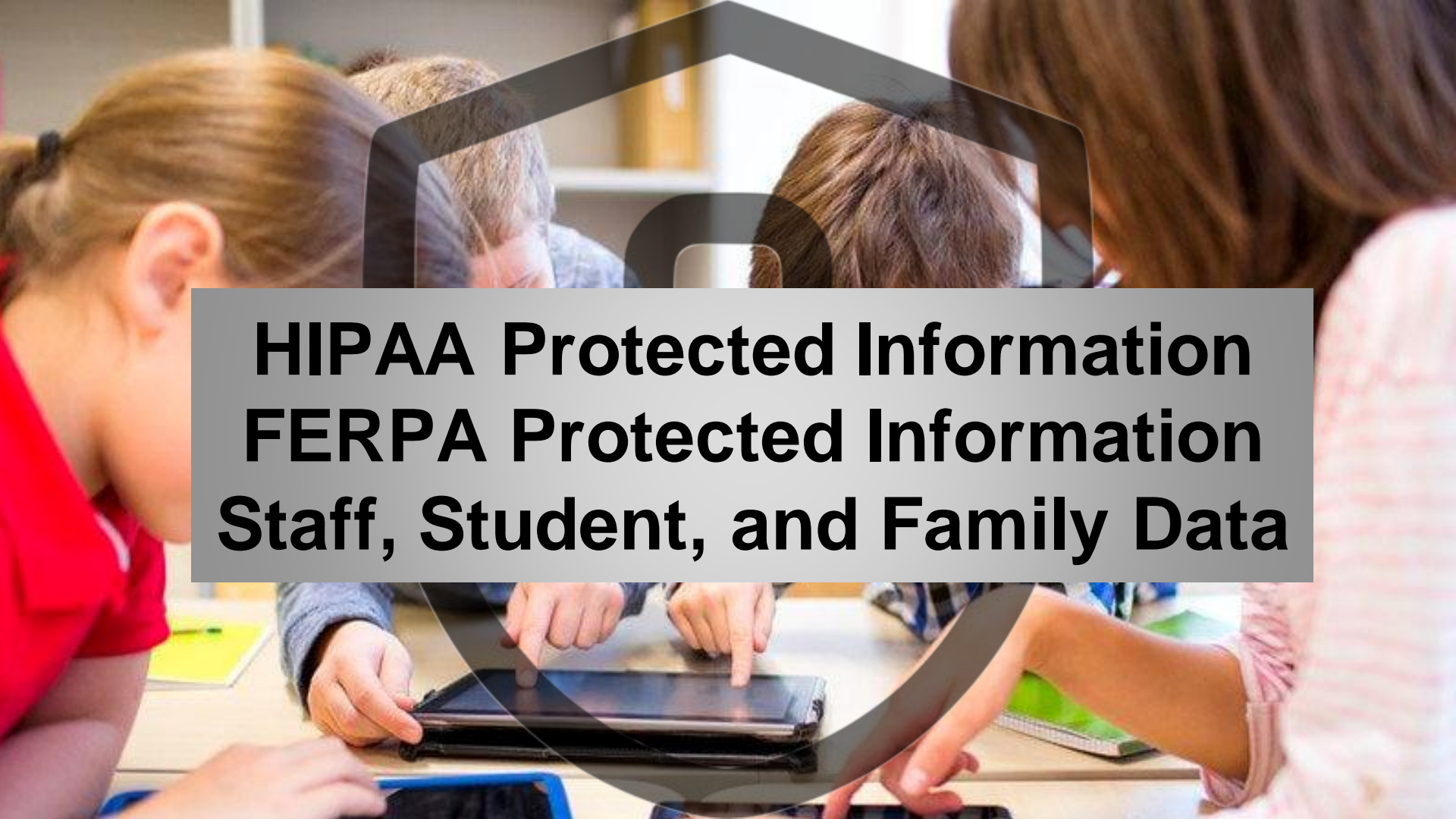
# COVID Challenges



- **Broadband access limitations (500 WiFi Hotspots)**
- **Addition of 1,800 Chromebooks for K-2 students**
- **LMS (Canvas) adjusted for K-2**
- **Feeding children and families - creation of “drive-thru” system**



# Cybersecurity

A photograph of several students in a classroom setting. They are gathered around a table, looking at a tablet computer. One student is pointing at the screen. The background shows other students and classroom shelves. A large, semi-transparent grey box with a white outline is overlaid on the image, containing text.


**HIPAA Protected Information  
FERPA Protected Information  
Staff, Student, and Family Data**



# Data Governance

# Data Team

- Meet weekly on Mondays
- Have a running agenda with minutes
- Start by reviewing requests for data
- Decisions come from the “Data Team” vs. individual staff member
- Initial purpose was for IC access requests - IC group configuration
- Timeframe: 30-60 minutes max



## Data Team Agenda and Minutes

2019 - 2023 School Year  
This document serves as a running agenda and minutes for the data team meetings.  
The most recent information will be at the top of the document.

### Parking Lot Agenda Items 2022-23

- Position Control Weekly Review
- Powerschool HR/Finance Transition
- [IC Access Requests](#)

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10/17/2022 Meeting

- Priority Work and Updates**
  - Update from Powerschool meetings
  - Keycard restrictions status?
- Project Listing**
  - Technology Services Manager**
    - Enter here
  - Special Education**
    - Enter here
  - SIS Manager and Asst. SIS Manager**
    - Aaron Herm - Behavior Request for counselor and sped - notifications
    - Working on Vel Phillips set-up in sandbox
    - Craig and Rachael working on bus info on addresses
    - PD - Secretaries/Google
    - Shonda/IC Conference
  - Human Resources**
    - Enter here
  - Database Developer**
    - Name Changes
  - UX Analyst**
    - Enter here
  - Curriculum and Assessment**
    - Enter here


# Data Security - More than just Data Governance

**INFOSEC IQ** Data Security Training/Phishing

 **Cynet** Threat Detection/Mitigation  
HOLISTIC SECURITY SIMPLIFIED

 Grade K-8 Students Email Internal Only



A group of people are gathered around a table, looking at a tablet. The image is partially obscured by a large, semi-transparent grey rectangle containing text. The background shows the backs of several people's heads and shoulders, suggesting a collaborative work environment. The text is centered within the grey rectangle and is written in a bold, black, sans-serif font. The text lists five benefits: Improves Operations, Improves Database Synchronization, Builds Awareness of Data Systems, Improves Data Quality and Analytics, and Provides Data Privacy and Safety.

**Improves Operations**  
**Improves Database Synchronization**  
**Builds Awareness of Data Systems**  
**Improves Data Quality and Analytics**  
**Provides Data Privacy and Safety**

# Data Security & Privacy - Faster than the other guy...



“You don’t have to run faster than the bear to get away. You just have to run faster than the guy next to you.” ~Jim Butcher



# The Future

# 4th Industrial Revolution

1st Industrial Revolution



2nd Industrial Revolution



Mechanization  
Gen

3rd Industrial Revolution



Mass Production  
(19th Century)

Digital Revolution  
(Late 20th Century)

4th Industrial Revolution



Robotization, Nanotech, IoT, and A.I.

(Industry 4.0)

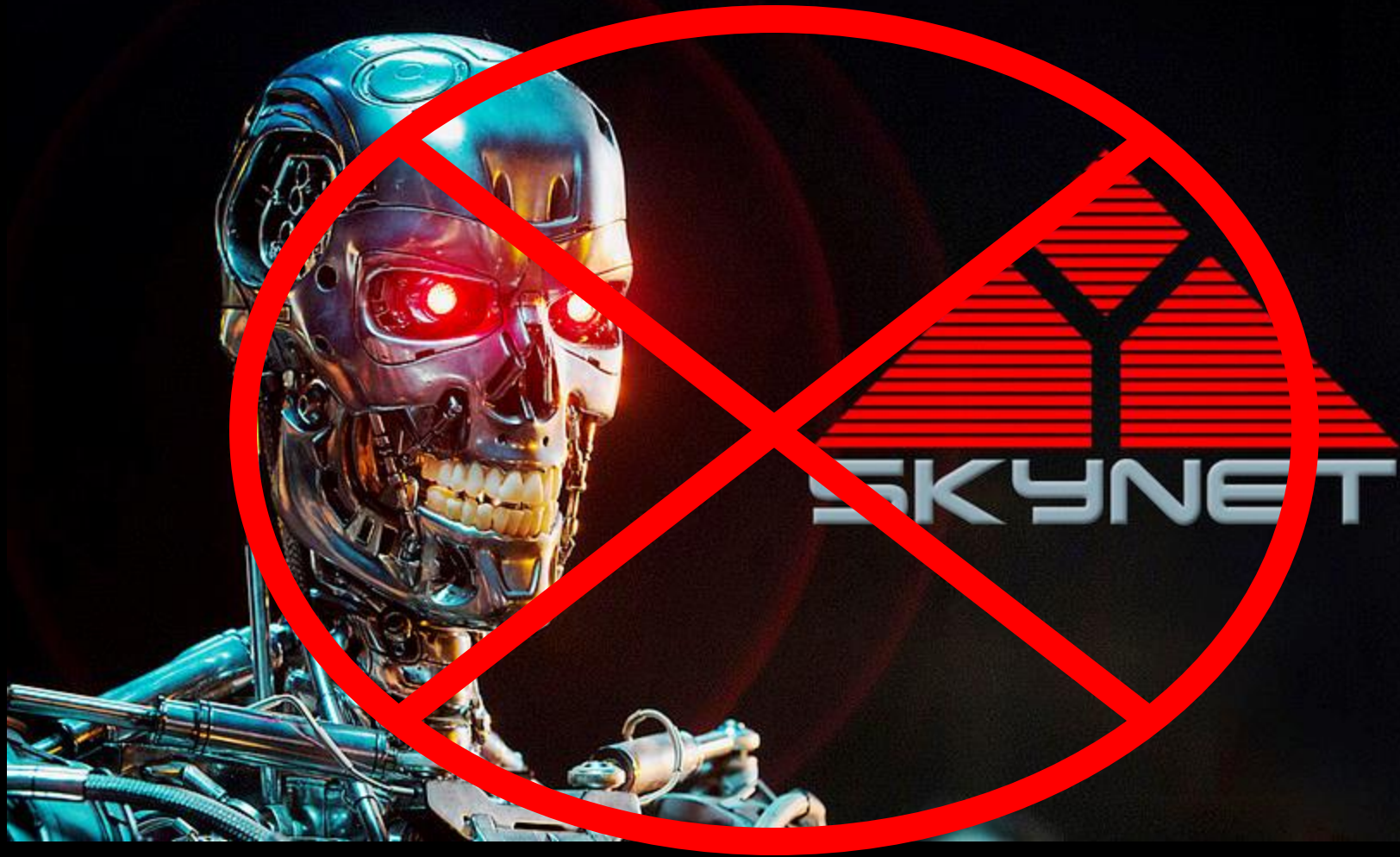
“The Fourth revolution is evolving at an exponential rather than a linear pace. Moreover, it is **disrupting almost every industry in every country.**”

~Klaus Schwab,  
(World Economic Forum)



ARTIFICIAL  
INTELLIGENCE

**What is it....REALLY?**



# Evolution and Understanding of A.I.



**AI IS PROTECTING FIREFIGHTERS! IT'S BECOMING THE FIRST LINE OF DEFENSE**

ARTIFICIAL INTELLIGENCE LATEST NEWS

by Market Trends | Aug 19, 2022

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### LiveSmart Launches SeniorLife -- A Platform to Transform Senior Care with AI

NEWS PROVIDED BY SeniorLife Technologies, Inc. August 19, 2022, 07:47 GMT

SeniorLife uses proprietary AI vision and encryption to detect and recommend therapies and

BELLEVUE, WASHINGTON, U.S. (ENR) — LiveSmart's smart home solution provides a platform to transform senior

Firefighters say that the human lives from an un-

The company SeniorLife Tech headquarters in Bellevue, WA and a development center in addition to LiveSmart, LLC, venture include Internet of Things (IoT) and hundreds of senior daycare centers. The Founder and Chairman of SeniorLife, Inc.



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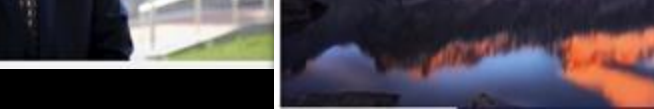
Did a Robot Help Create That Ad? The Answer, Increasingly, Is Yes.

This YouTube Star Says AI Will Become a Creative 'Collaborator' With Students

Algorithms Can Now Mimic Any Artist. Some Artists Hate It

A new generation of AI image tools can reproduce an artist's signature style. Some creators fear for their livelihoods.

These Are Not Photos: Beautiful Landscapes Created by New AI



nature

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POSTED AUGUST 19, 2022

### The AI system that picks carcinogens out of the chemical crowd

AI, ARTIFICIAL INTELLIGENCE, DEPAIR MEDICINE, NEWS, SAM HODGE, RESEARCH

### The future of med



These Are Not Photos: Beautiful Landscapes Created by New AI



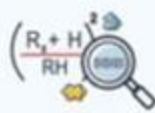
# AI



Artificial Intelligence



Cybernetics



Problem Solving



Deep Learning



Machine learning



Robotics



Neural networks





# A.I. - Coming to a car near you!



# A.I. Impacting Our World Today



(Getty Images)

## Philly transit to try AI video for gun detection

The Southeastern Pennsylvania Transportation Authority is preparing to become the nation's first major transit system to employ technology from ZeroEyes, an AI-powered video platform that alerts public safety officials when a firearm is detected. By running a six-month trial on 300 live cameras next year, officials said they hope the artificial intelligence technology will prove a viable tool to prevent gun-related violence on train platforms serving the Philadelphia metro area. An authority spokesperson told The Daily Pennsylvanian that while incidents of gun-related violence are "very rare" on its trains, "even one is too many." **Colin Wood has more.**

🕒 DECEMBER 9, 2022

## Aging is driven by unbalanced genes, finds AI analysis of multiple species

by Northwestern University



Credit: Unsplash/CC0 Public Domain

# A.I. Impacting Our World Today

## Universal vaccine advancement through AI and recombinant technology

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Sponsored Content by [Sino Biological Inc.](#)

Oct 3 2022

Reviewed by [Alex Smith](#)

### Thought Leaders

Dr. Amy Sheng, Dr. Lurong Pan  
Technical Account Manager, CEO  
Sino Biological Inc., Ainnocence



*In this interview, NewsMedical talks to Dr. Amy Sheng, a technical account manager at Sino Biological, and Dr. Lurong Pan, founder and CEO of next-generation biotech startup Ainnocence, about how artificial intelligence (AI) can be used in combination with high throughput production and screening to enhance the development process for potential universal vaccines.*

## How can vaccines keep up with evolving Covid-19 variants?

BY JONATHAN SMITH  
JULY 28, 2022 - 7 MINUTES



Image/Anastasia Slynko

**Vaccines for COVID-19 have saved lives all over the world, but their protection is threatened by the rise of variants of concern. Companies are developing ways to combat the evolving virus, such as booster shots and universal coronavirus vaccines.**

# A.I. Impacting Our World Today

4 hr 21 min ago

What you need to know about today's nuclear fusion announcement — and what comes next

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## DeepMind A.I. helps control nuclear fusion reaction, potentially producing more energy

BY JEREMY KAHN

February 16, 2022 at 10:00 AM CST



NIF Target Area operators inspect a final optics assembly during routine maintenance at Lawrence Livermore National Laboratory's National Ignition Facility. (Jason Laurea/Lawrence Livermore National Laboratory)

# A.I. Impacting Our World Today

**CNET**

Your guide to a better future

Tech > Computing

## Why Everyone's Obsessed With ChatGPT, the Mind-Blowing AI Chatbot

This artificial intelligence bot can converse, write student essays and program computers. Careful how much you trust it, though.



**Stephen Shankland**

Dec. 13, 2022 9:06 a.m. PT

8 min read

## Nvidia pops as Citi ponders whether ChatGPT could be a 'Pokemon Go' moment for AI

Dec. 13, 2022 8:43 AM ET | **NVIDIA Corporation (NVDA)** | AAPL, GOOG, TSM... | By: Chris Ciaccia, SA News Editor | 66 Comments



vzphotos

<https://chat.openai.com/chat>

# ***Time of Exponential Change***



# Near Future Innovations

## Intelligent exo-skeletons



## Brain reading robots



Robot arm being used with brain signals © Alain Herzog 2021 EPFL

# *Future Innovations*

## Working in VR



Car mechanic wearing VR glasses in a workshop working at car  
Captions are provided by our contributors.





# Near Future Innovations

A toilet that analyses your deposits

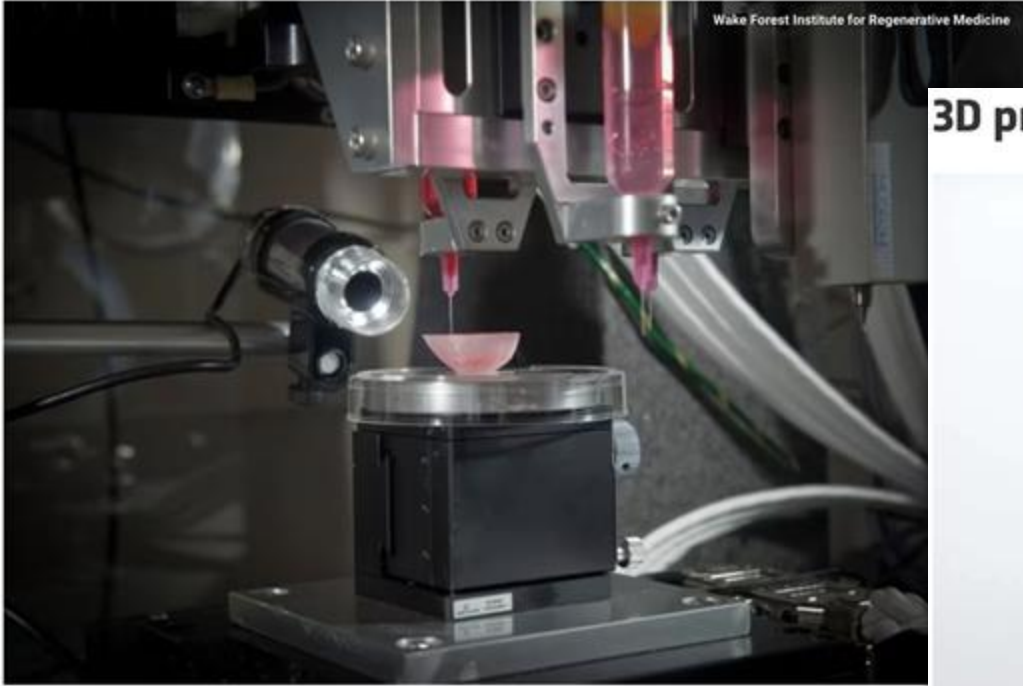


Nanobots that check your health

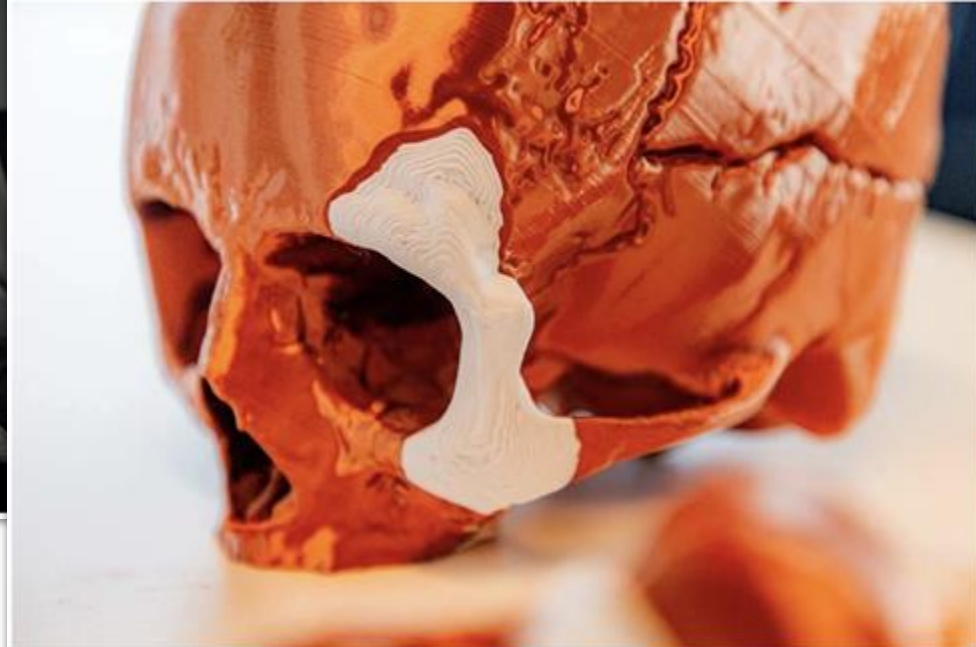


# *Near Future Innovations*

## 3D printed organs



## 3D printed bones



3D printed bone implant © Ossiform

# Near Future Innovations

Digital "twins" that track your health



The Q Bio dashboard where users can track their health © Q Bio

## Personal air



# *Near Future Innovations*

Li-Fi



Robot bees



**FUTURE**





# Challenging Questions

**How do we prepare students to compete and thrive in an exponentially changing future?**



A hand holding a tablet displaying the word "EQUITY" in a glowing blue font. The background is a dark blue digital interface with various data visualizations including line graphs, bar charts, pie charts, and a globe. The overall aesthetic is futuristic and data-driven.

**EQUITY**

**In a world of exponential innovation, how do you define and provide digital equity?**





**How do we access  
curricular time  
when our state  
accountability  
metrics don't  
measure future  
skills?**

# How Do We Prepare Students For Their Future?



*A good hockey player skates to where the puck is, a great hockey player skates to where the puck is going to be*

*~Wayne Gretzky*