The Future of Library Experiences

The Art & Science of Looking at the Future





Garry Golden
Forward Elements
March 25, 2019



Foresight 101



Drivers of Change



Next Steps



In the News

UK's NHS (CHOICES) and Google's DeepMind Health pilot will bring AI-driven healthy living to families with children.

Families receive a stipend for food purchases in exchange for Google's *AI* guiding meal planning, supermarket purchases, meal preparation and exercise routines. Food stipends increase when youth health outcome targets are met.









Context of the Creepy Line

Google

Digital Innovations might push the Creepy vs Compelling Line for...

Library Social Impact Efforts

THERANDBLOG

"Libraries are so much more than just books," says (Tina) McBee, who sees their role as shifting more and more to asking: "How can we help the community?"

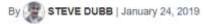


(Dealing with obesity)... patrons of the Hundred Public Library can check out one of the eight bikes, including a tandem, as well as helmets, horns, bells, and even a baby trailer—for free.

Institutional Check-ins, Audits & Self Work

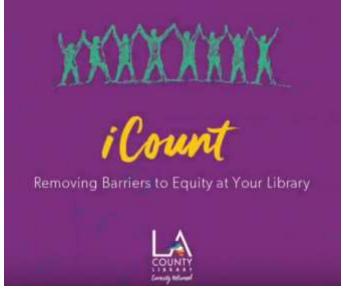


The Organic Role of Libraries as Centers of Inclusiveness and Support





The iCount Initiative:
Removing Barriers to Equity



Library Equity Action Plans (LEAPs)



Skye Patrick

What's Possible: Emergence of Alternative Funding Models

SOCIAL

Canada

LAUNCHED

IN DEVELOPMENT

CURRENT FILTERS

Impact Bond Global Database

Social Impact Bonds Outcomes, Innovation & Shared Risk

IMPACT BONDS

COUNTRY -

CAPITAL RAISED

INVESTOR **T**

ISSUE AREA ▼

\$426м 1,062,030 LIVES TOUCHED

Russia

China

LIST OF PROJECTS ▼

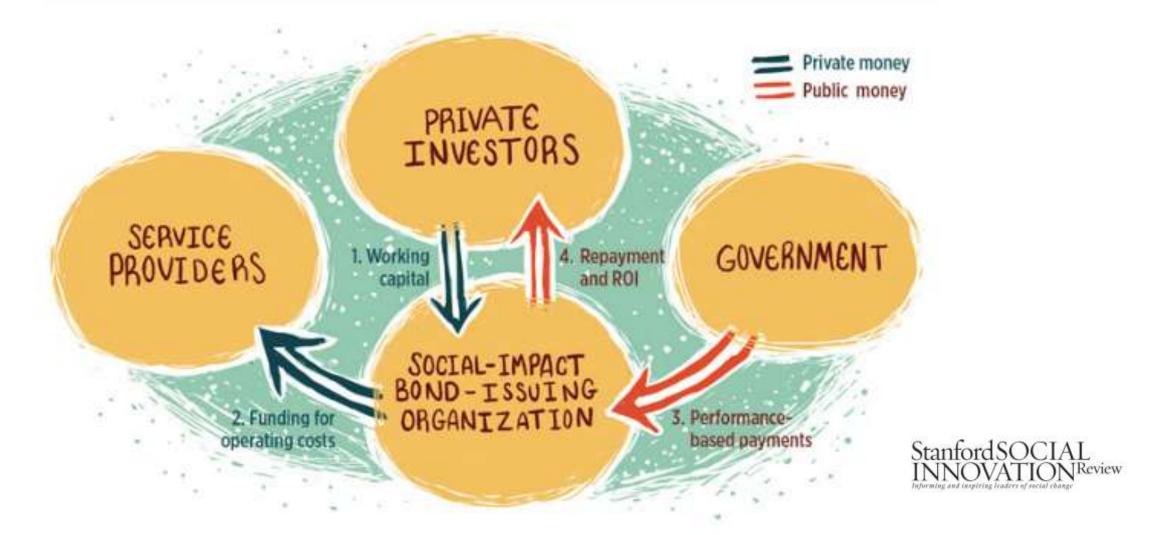
PAYOR **T**

PRINT

RESET

SERVICE PROVIDER ▼

Lessons to Explore Around the Futures of Impact Investing / SIBs



Early Intervention, Levers of Change, New Stakeholders & Focus on Outcomes

Creepy vs Compelling Aspects of Funding & Intervention Models

David Napoli @Biff_Bruise · Mar 20
Social impact bonds ETW -- great example of #Comr

Social impact bonds FTW -- great example of #CommunitiesOfSolution from @JBrownDPost #COhealth



Denver sold bonds to reduce the human and financial costs of homel...

250 people — all homeless and high-frequency users of jail, detox and emergency departments at taxpayer expense — have been tracked dow... denverpost.com



Humane Education Versus Educational Technology and Pay for Succ...

Today I offered public testimony at a special hearing discussing early literacy education and standards held by the Education Committee of Philadelphi...

wrenchinthegears.com

Scenario 2020s: Communities Embrace Social Impact Funding Models



£7million fund that brings together public, private, and charitable investment to support arts organizations in England and the first to focus on their social, artistic, and financial return.



Village Underground

The music venue will create a new multi-arts centre in Hackney and partner with arts charity Community Music to deliver social programmes



Autograph Media

Autograph Media will use investment to set up a new image licensing business specialising in race and cultural diversity.



V22

The studio space provider will use investment to increase its portfolio and preserve a valuable heritage site for community use and benefit

Scenario 2020s: Libraries & Social Impact Funding Models

Libraries Involved in Impact Investing for...

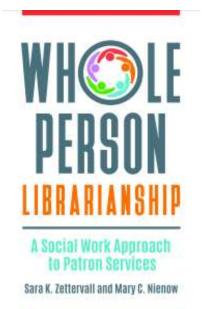
- □ Project Partners
- Fund Recipients
- Resources
- Advocacy
- ☐ Critics

- ☐ Early Childhood Literacies
- ☐ Sustainability Resiliency Planning
- Building Energy Transitions
- **☐** Young Adult Programs
- ☐ Creative + Active Aging
- ☐ Memory Care
- **□** Support for Caregivers
- ☐ Workforce Skills-building
- □ Addiction + Recovery
- □ Transitional Housing
- ☐ Play + Wellness
- ☐ Food Security

The Learning Curve Starts Here!











Garry's Tags: https://www.diigo.com/user/garrygolden/SIBs

Before we talk about what is changing...

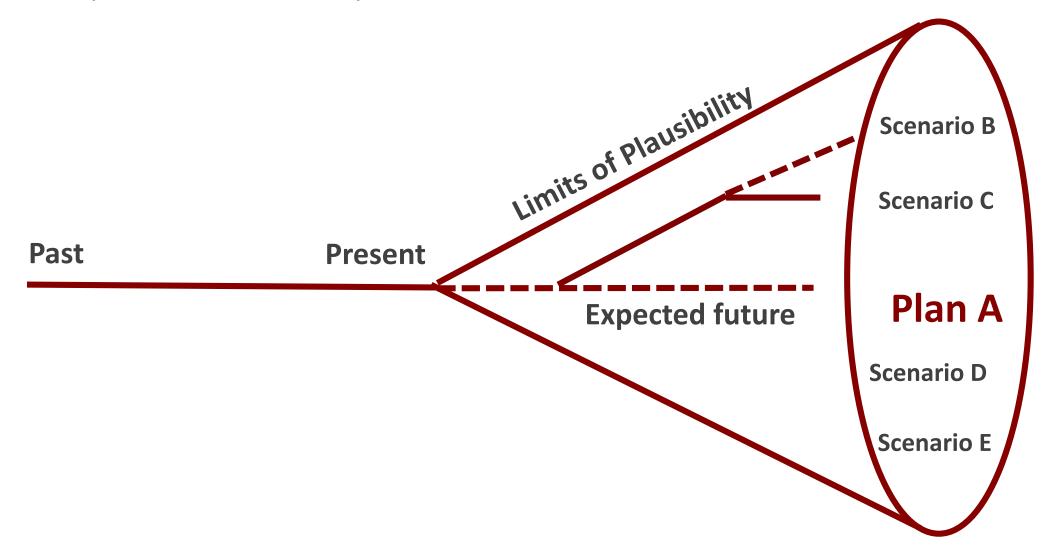
Removed 'Cute Kids' Image Sequence

Thinking Like a Futurist?

Removed 'Futurist' Image Sequence

Foresight 101: Cone of Plausibility

Multiple Outcomes, Multiple Time Horizons



Every day I make an effort to move toward what I do not understand.

- Cellist, Yo-Yo Ma

Challenges of Talking About the Future

Addressing Foundations



Purpose, Happiness vs Helplessness



Self-Work on Equity & Justice



Feeling 'Futuristic'



Techno-Solutions



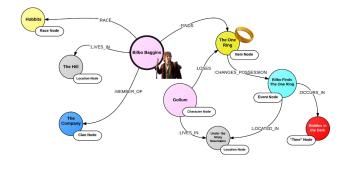
Empowered Self





Growth









Age of **Experience Graph**

Health & Wellness

Role of Place

2020 - 2030

How might data-driven change reshape the library experience?

What might be the most valuable type of data in 2030?



How might we understand ourselves and tell our stories?



Resume



Portfolio



Presence

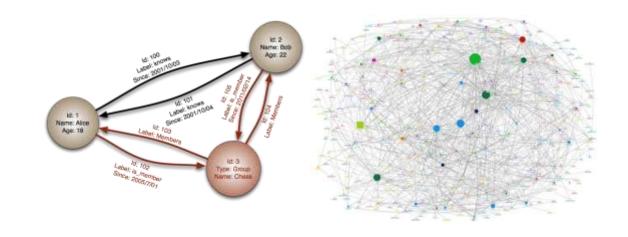




Stories of our social selves... Stories of our growth & journeys



Era of Social Graph



Era of Experience Graph

Removed 'Dog' Image Sequence

Outputs Mission:

Access to Collections



Outcomes Mission:

Behavior Change & Development of Skills

Outcomes-based Value Creation Depends on...

Competitive Advantage

Prescriptive

What should happen..!

Predictive

What might happen..

Descriptive

What happened..

Complexity of Data and Relationship Management

Emergence of Data & Outcomes-driven World



Social Data



Health Data



Device + Infrastructure



Learning & Doing Experience Data

Data isn't truth, but language. It can help us decide or express the truth, but data never is the truth.

- Deanna Day

Signal of Change from the Learning & Development (L&D) Community



Activity Streams <Actor, Verb, Object> "I did this"





"I did this..."

Statements

Seamless Integration into Manager & Team Tools



Assumption:

Experience Data Appears Inside School, Workplace & Beyond

Scenario: Talent Embraces Experience Capture Analytics

☐ Sarah *read* an article on blockchain for automating compliance ☐ Sarah **opened** an Evernote folder on blockchain solutions ☐ Sarah *watched* a Youtube video introducing the Ethereum blockchain ☐ Sarah *searched* for Ethereum Meetups in NYC "I did this..." ☐ Sarah *attended* the Crypto Compliance conference in NYC **Statements** ☐ Sarah **created** a List of 'Ethereum Developers' (People) on Twitter ☐ Sarah *interviewed* the Head of Blockchain Solutions at JPMorgan ☐ Sarah *mentored* with Joe Lubin co-Founder of Consensys ☐ Sarah *completed* a course on Ethereum's Solidity programming language ☐ Sarah *demonstrated* her pilot Ethereum application at a NYC Meetup ☐ Sarah *taught* a Coursera MOOC on Ethereum for KYC / AML Sarah was hired as Lead Developer of Blockchain Compliance Solutions at Fidelity



<Actor, Verb, Object> "I did this"

- ☐ Thomas **liked** a **Lucille Clifton** poem he heard on iTunes ☐ Brentwood library **invited** Thomas to a **Creative Aging poetry event** ☐ Thomas **enrolled** in a creative writing class at Community College ☐ Thomas **read Alice Walker** for his creative writing course ☐ Brentwood library **recommended** an obscure **Rita Dove** poem ☐ Thomas <u>performed</u> his poetry at a local café event ☐ Brentwood library **invited** Thomas to a **program on self-publishing** ☐ Thomas **self-published** his first collection of poems ☐ Brentwood library <u>added</u> his book to their collection

Enterprise L&D: Early Adopters Preparing to Scale



How did we do it?: Where are we now?

April 2018:

Over 3 million statements so far

Over 110,000 learners who are sending xAPI statements

We are using 1 LRS system which is segmented by data for each country

Last three months increased our total by 1 million statements

Summer 2019:

We will have 250,000+ learners using it and sending xAPI

We will have a global learning analytics community of around 100 people whose role (full/part) is to look at learning data and help transform our learning

Start small and grow...this is a long journey

Outcome: Seeing What People Need vs They Tell You They Need

Clicked Create Delete Downloaded Launched Listened Loggedin Opened Paused Read Searched Share Skipped Viewed Watched

Searched verbs

Running training needs analysis in real-time

Using the searched verb we can analyse what people are looking for example:

- Tax legislation
- Tax processes legislation
- Excel macro creation
- Macro creation
- Coaching
- Coaching skills
- Coaching management skills

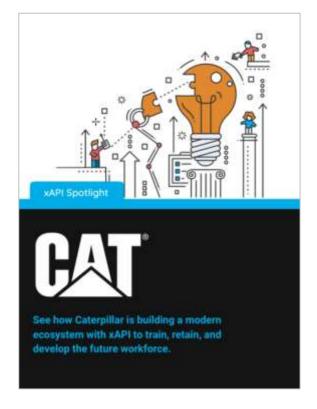
We can use this data to:

- Highlight need see what learners want
- Match available learning to need and tag our content – dynamic curation
- Spotting holes in our learning our gaps
- Global coverage spotting patterns across countries, trending topics

Case Study: Caterpillar







Understanding LMS/CMS Activity

Expanding Video-based Analytics

ExperienceAPI (xAPI) L&D integration with focus on training for Service, Sales, Leadership & Marketing.

When trying to help someone learn, the team considers these three vital questions:

- 1. Where does the learner want to go?
- 2. What does the learner know?
- 3. How can we develop the individual?

Scenario for 2020s: Lifelong Learning Experience Data (for Some)







Assumption to Explore

By 2025, Experience Data Will Become Our Most Valuable Digital Asset

and Controversial

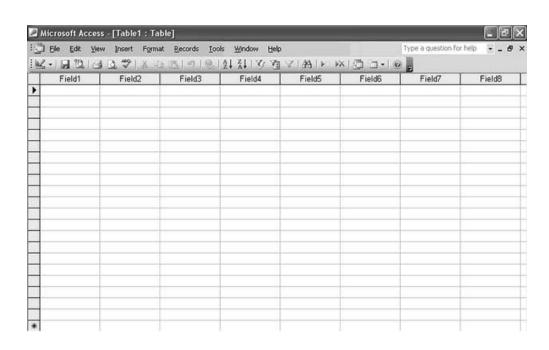
If we capture experience data...



"I did this..."
Statements

How do we approach regulations?
How do we avoid the creepy line?
How do we make sense of it?

Building a Connected Data Foundation for Innovation



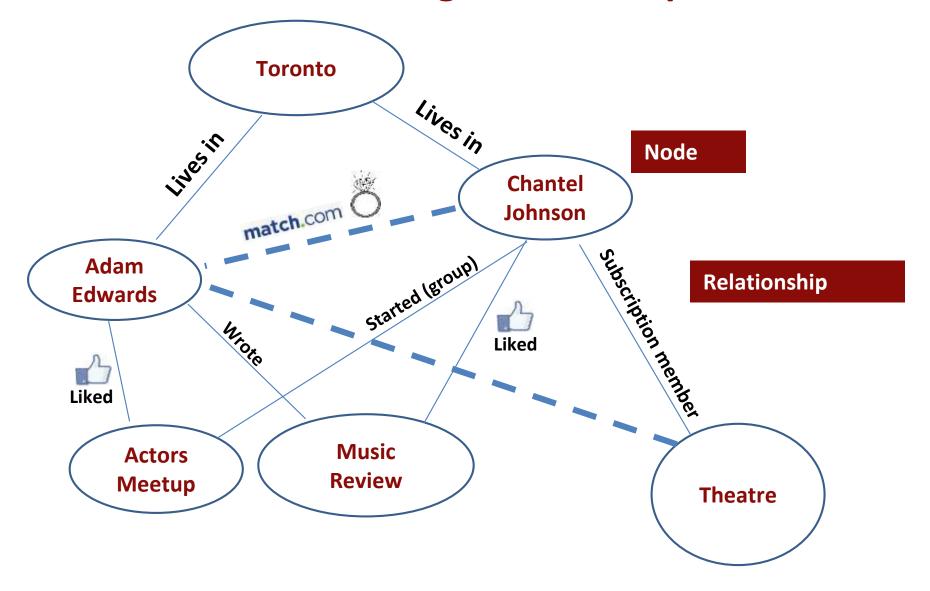
Tables = Past



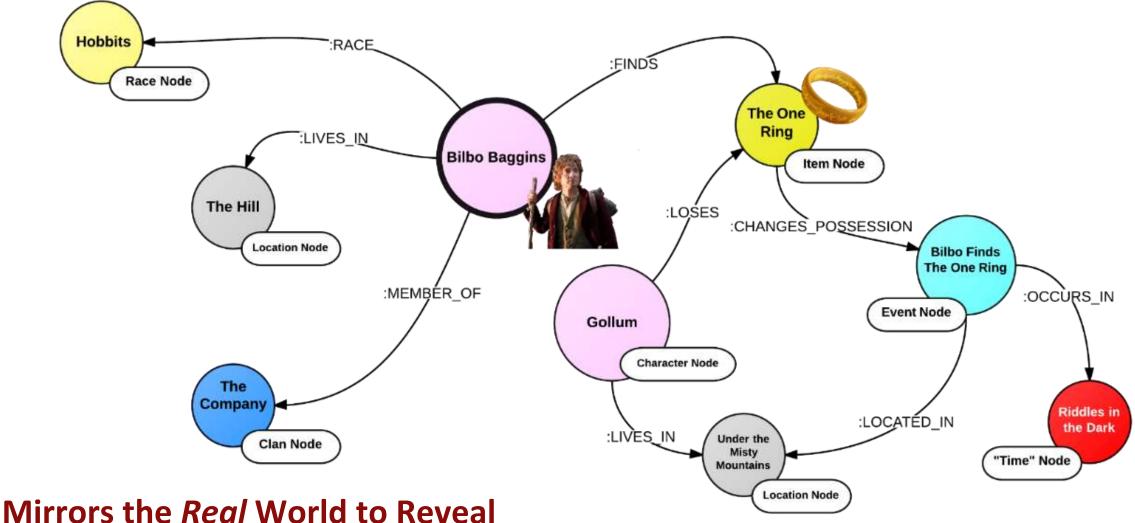


Graph Thinking = Future

Graph Database = Understanding Relationships + Connections

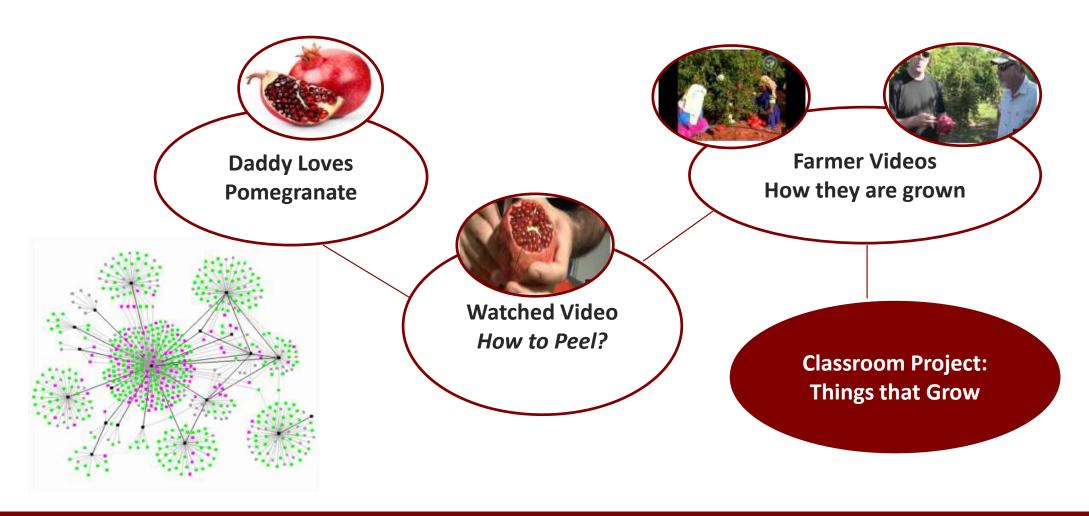


Graph Solutions for Understanding the Campus Journey vs Outcomes



Influencer Profiles, Decision Pathways and Recommendations

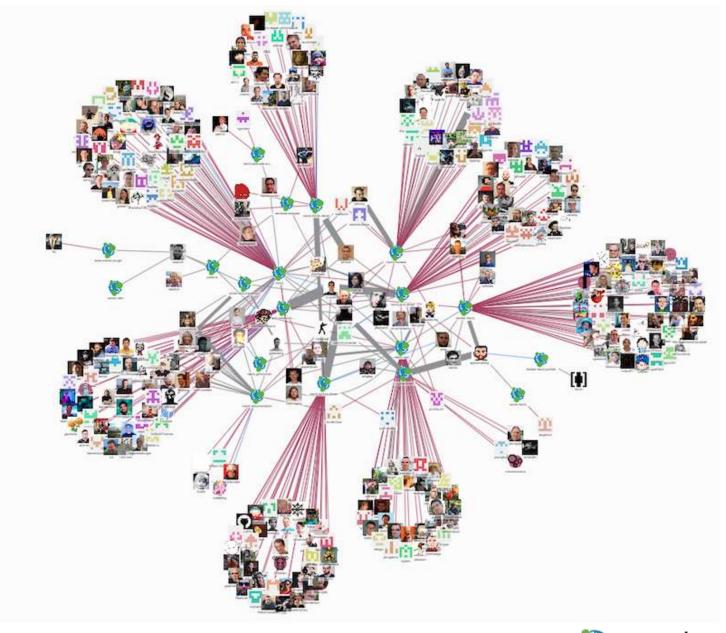
Noah is Connecting Things on his Experience Graph



Who might have permission to see connections of experiences? Learner, Teachers, Parents, Libraries, Museums, Park Staff...

Imagine seeing connections of experiences (and outcomes) across our communities...

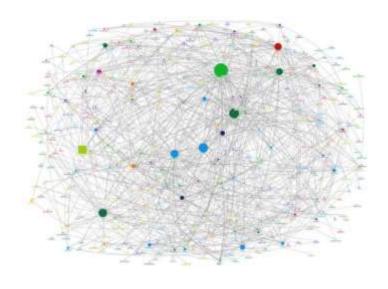


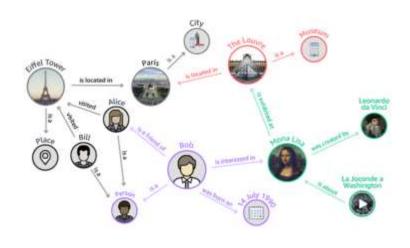




How might libraries prepare for an era of connected lifelong learning data?







Era of Social Graph

Era of Experience Graph

Collections to Knowledge Graphs

Scenario: Public Libraries Meet Connected Experience Data

Short-term – 2019 -2023

- ☐ Map out opportunities & challenges
- What experience data could we create, capture and connect?(e.g. appropriate; actionable)
- ☐ Engage with existing efforts
- ☐ Learn about Vendors:

Learning Record Stores (LRS) Knowledge Graphs

Long-Term – Beyond 2023

- Overcome Challenges(e.g. blockchain used for privacy)
- □ Align institutions, policies, social norms& technology capability



Breaking News

News from 2025

Supreme Court Upholds Students' Rights to Own Experience Data

College students successfully argue their right to learning and performance analytics in the classroom and beyond in the workplace. Ripple effect will likely go beyond campus into the workplace as society tries to understand implications of this strange data-driven age.



"The resume is dead.

Long live the Experience Graph"

DAILY ALTERNATIVE FACTS

Class of 2028

Donates Experience Data

Having won its right to experience data, more than 70% of the Class of 2024 have open-sourced their Learning Pathways to be shared across the World. Anyone eager to learn similar subjects and skills now have learning pathways to explore.

BREAKING FAKE NEWS

News from 2032 FBI Investigating Massive Hacking of U.S. Workforce Experience Graph Nearly 125 million privately managed Experience Graphs were hacked in 2031 across some of America's leading corporations. Older Millennials now pointing fingers at younger siblings: "You should have

stuck with the Social Graph".

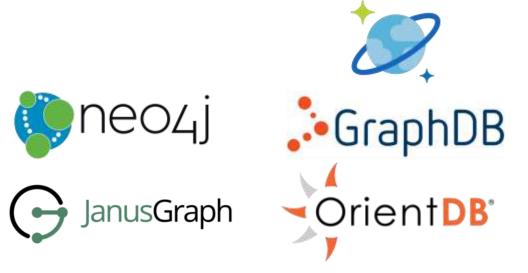
Learning Curve







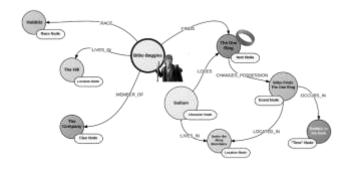
Experience Analytics Learning Record Stores



Graph Analytics

Break





Age of Experience Graph



Health & Wellness



Role of Place

2010 - 2019
Positive changes in health + wellness?

2020 - 2030
What challenges and opportunities do we anticipate will change around campus life?



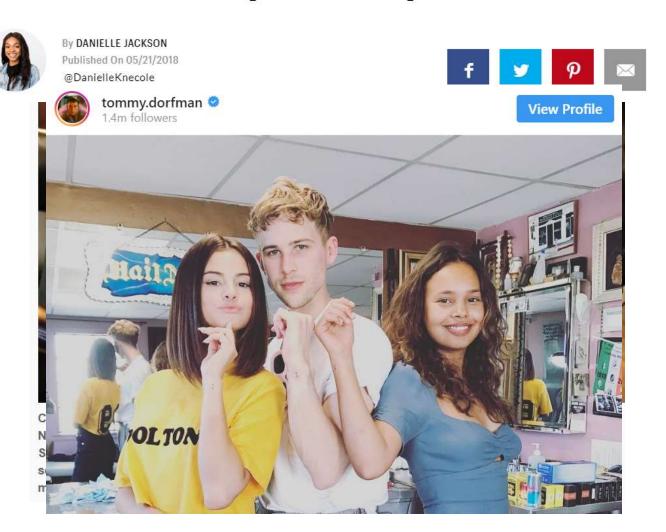
Rise of Campaigns, Memes and Movements

Here's What Clay's Semicolon Tattoo on '13 Reasons Why' Actually Means





Amy Bleuel



Institutional Capacity & Culture



Programs: Repost, Mindful Mountaineers, Take 10, Semicolon Week

















Evolution in Dealing with Disciplinary Challenges

Training Staff in Restorative Practices

An emerging social science that studies how to strengthen relationships between individuals as well as social connections within communities.



PIMA COUNTY PUBLIC LIBRARY



Five Universal Truths of Human Interaction

- 1. People want to be treated with dignity and respect.
- People want to be asked rather than being told to do something.
- People want to be told why they are being asked to do something.
- 4. People want to be given options rather than threats.
- People want a second chance when they make a mistake.



George J. Thompson III, PH.D., Verbal Judo







A DIVISION OF THE AMERICAN LIBRARY ASSOCIATION

Conflict as Opportunity: Library Restorative Practices for Youth

A free PLA 2018 post-conference on-demand webinar



Pima County (AZ) Public Library (PCPL) has radically shifted its approach toward interacting with youth in violation of the library's Customer Code of Conduct. Using restorative justice practices, PCPL created a justice board with community partners to facilitate more mindful approaches to incidents involving youth, focusing on creating opportunities for growth and engagement rather than barriers to library access. This webinar explores the praxis behind this organizational culture shift including the successes and challenges faced by staff.

http://www.ala.org/pla/education/onlinelearning/webinars/ondemand/pla2018-conflict

Youth-led & Peer Driven Change



HEALTH

A New Sign That Teens Know They Aren't Struggling Alone

Their worries about mental health might have a bright side.

AMANDA MULL FEB 25, 2019



NCAA Awards Grant for UK College of Education Mental Health Research

By Amanda Nelson Feb. 28, 2019

Student Athlete Voices on Mental Health

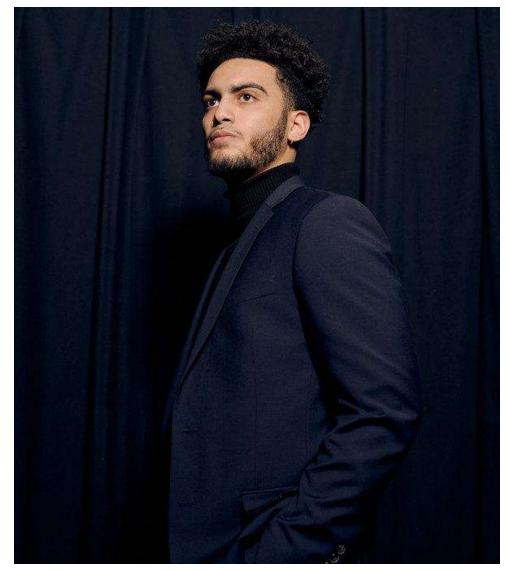
March 14, 2019

The New Hork Times By Pat Borzi

A Top Scorer Changes the Definition of the Complete Player

"A lot of people in my position wouldn't want to say anything," Marquette guard Markus Howard, the Big East player of the year, said of going public about seeking mental health counseling.

...Olympians <u>Michael Phelps</u> and <u>Gracie Gold</u> to the N.B.A. star <u>Kevin Love</u>



Vincent Tullo for The New York Times

The Debate will be 'should we'...



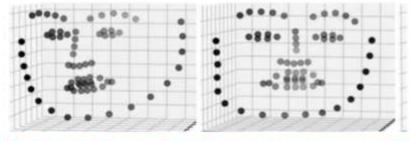
Intelligent Machines

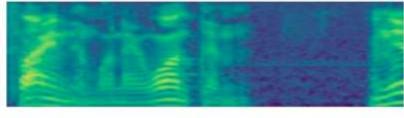
Your smartphone's Al algorithms could tell if you are depressed

Smartphones that are used to track our faces and voices could also help lower the barrier to mental-health diagnosis and treatment.

by Will Knight December 3, 2018

Technology Review





. yeah . . . i mean

2020 -2030:

How much wellness data will patrons have vs understand?

Million Data Points Per Person

Dr Lee Hood

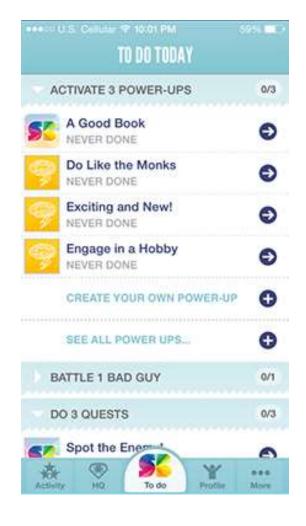




2020 - 2030:

What services/expectations might they bring to the library?





Amazon develops 'health and wellness team within Alexa division'





PRODUCTS May 16, 2018

MetLife and Ernst & Young Create Multi-Channel Wellness Program

The solution will focus on behavioral change by providing personalized wellness plans, according to MetLife.

2020 - 2030:

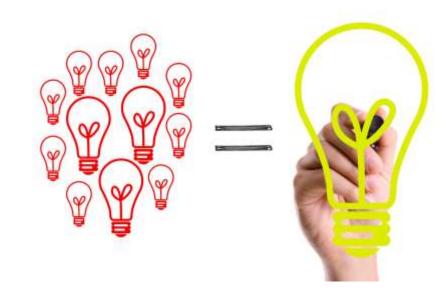
Will health factors for indoor environments be seen differently?

SoFi and Delos Partner to Bring Delos' Home Wellness Solutions to Homeowners

Mar 22, 2019 💂 0

Wellness real estate and technology company, Delos™, is collaborating with online personal finance company, SoFi, to ensure homeowners will have an accessible financing path to implement Delos' DARWIN Home Wellness Intelligence Network, a fully-integrated residential solution designed to enhance the health and well-being of residents.

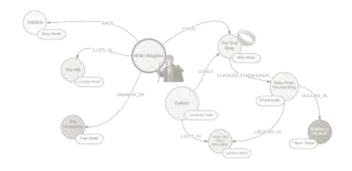
How might we rethink health + wellness integration?



Start

Stop

Continue







Age of Experience Graph

Health & Wellness

Role of Place

Role of Place



Third Place is a Real Thing



Pedestrian
Friendly Zones



"Pop Up" Culture



Places for Connections: Live Experiences, Together



Retail Healthcare



Places to Pause...
Mindfulness
Meditation
Sensory Enhancements
Sensory Deprivation
Play with Dogs

A Space Apart



College libraries contemplate meditation rooms

By Ronnie Wachter | January 2, 2018



Librarians Megan Donald (left) and Emily Tichenor of Tulsa (Okla.) Community College sit in the meditation room at the West Campus Library.

Phone: Tulsa (Ohla.) Community College

Brain Booth

HUMBOLDT STATE UNIVERSITY



~ Stop by and relax ~

Try out biofeedback, sound and light therapy,
VR goggles, coloring, meditation, and other
activities that promote intentional brain
breaks and support emotional self-regulation
and singular thoughtful focus.

Place to **Enhance Partnerships**

Libraries: Elevation of Housing Equity Issues



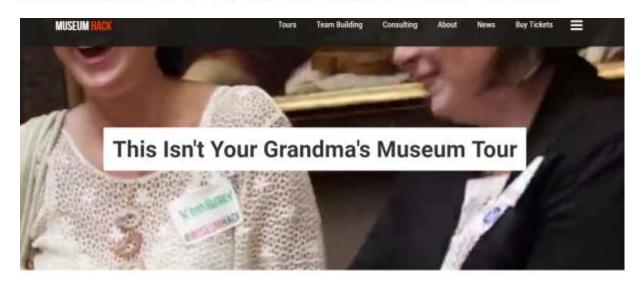
Community Created Alphabet Book





Hacking Places The Experience is the Destination

Hacking The Audio Experience: Museum Hack Is Part Of SFMOMA's New Tours!



A Fun, New Experience in NYC, DC, San Francisco & Chicago

We Lead Renegade Museum Tours for Individuals, Private Groups & Company Team Building



Library Teaches
Place-based
Programming





Place Use-Data

...Google Analytics for the library buildings?





Code

Bulla

About

ontact

Public-Beta

54 55 53

Open Hardware & Libraries

Imagine having a Google-Analytics-style dashboard for your library building: number of visits, what patrons browsed, what parts of the library were busy during which parts of the day, and more. Measure the Future is going to make that happen by using simple and inexpensive sensors that can collect data about building usage that is now invisible. Making these invisible occurrences explicit will allow librarians to make strategic decisions that create more efficient and effective experiences for their patrons.

Our goal is to enable libraries and librarians to make the tools that measure the future of the library as physical space. We are going to build open tools using open hardware and open source software, and then provide open tutorials so that libraries everywhere can build the tools for themselves.



Open Hardware



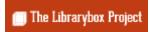
Smart Libraries



Open Tutorials



Jason Griffey



Place-based Messaging & Personal Safety **Staff Trained on Cues**

Countary of Safey Communities Senset Violence and Aloues Partnership, Lincolnstons. Dispiration of the "Alk for Angels" poster company. part of the MicPlace sexual votence and abuse in Lincolnshire asserters Campaign, sown incolnitive group, nomor

#ASK FOR ANGELA

66 HI I'M ANGELA,

ARE YOU ON A DATE DO YOU FEEL LIKE THAT ISN'T WORKING OUT? YOU'RE NOT IN A

SAFE SITUATION?

THEY SAID THEY WERE ON THEIR PROFILE?

IF YOU GO TO THE BAR AND ASK FOR 'ANGELA' THE BAR STAFF WILL KNOW YOU NEED SOME HELP GETTING OUT OF YOUR SITUATION AND WILL (ALL YOU A TAX) OR HELP YOU OUT DISCREETLY - WITHOUT TOO MU(H FUSS

www.met.police.uk/AskforAngela

Call 101 for non-emergency enquiries, to report an incident or get help.

If you're deaf or hard of hearing, use our textphone service on 18001 101.

Call 999 if it's an emergency or a crime is in progress.







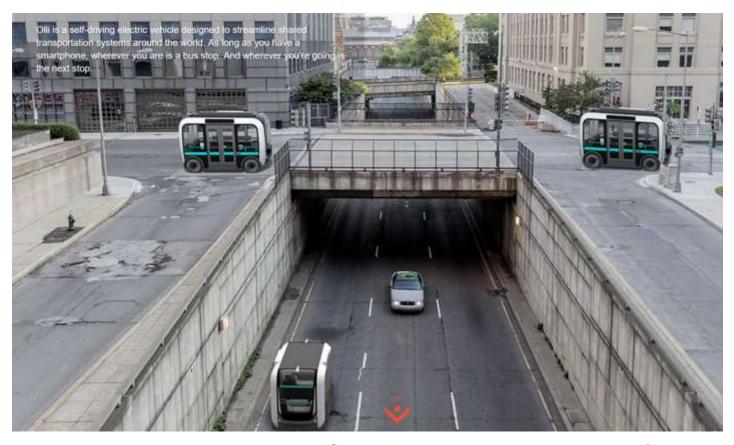


Libraries as a Hub for Micro Mobility



Mobility + Accessibility

Safety, Equity + Access

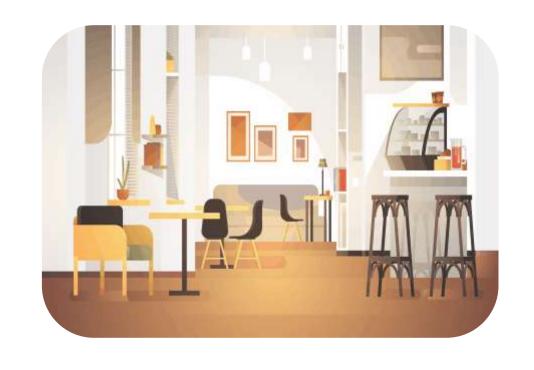


Autonomous People Movers Coming Soon!





How might the nature of place surprise us in 2029?



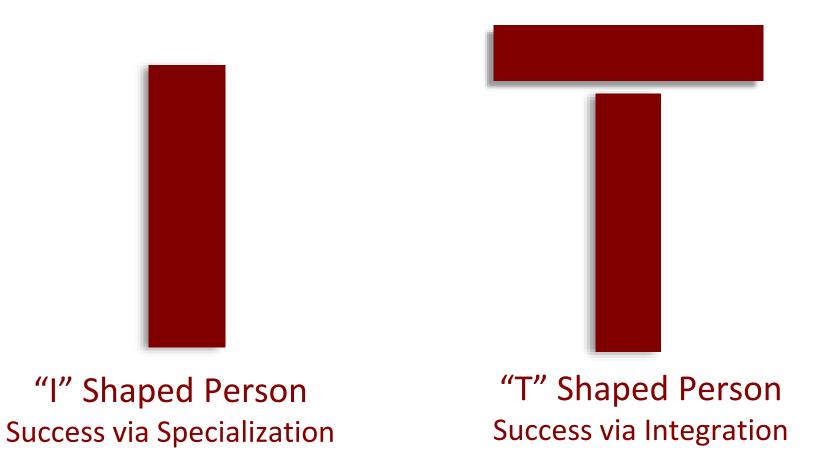


End



Next Steps

Launch Conversation on Who do we want to be ...?



What do we want to be as T-Shaped Individuals?



Also Trained in?

Ethics
Behavior Science
Cyber Security
Aging Populations
Systems Thinking
Experience Design
Service Design

Psychology
Data Science
Crypto / Blockchain
Restorative Practice

What is the biggest risk we should take over the next five years to align our libraries with the future?



Garry Golden

garrygolden@gmail.com

PDF: garrygolden.com/March25
Two Rs

Tags: diigo.com/user/garrygolden/KEYWORD

Four Futures Thinking













*** BlackBerry.

Continued Growth

Disciplined Constrained

Transformed

Decline Collapse









Continued Growth

Disciplined Constrained

Transformed

Decline Collapse