

# Becoming “Data Native”

## Library.Link Network Update



Jeff Penka

The Library.Link Network, Zepheira,  
and University of South Carolina



Growing Library Visibility Together/A Zepheira Collaboration

# Purpose Driven, Audience Focused



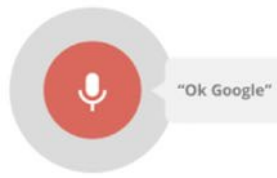
# Motivation and Perspective



Supplier  
(Push)



Consumer  
(Pull)



hulu



- Former chief scientist at Baidu,
- led the company's Artificial Intelligence Group
- Adjunct professor at Stanford University



 **Andrew Ng**   
@AndrewYNg Follow

For AI to be free we need not just Open Source, but also a strong Open Data movement.

RETWEETS 1,056 LIKES 1,657


1:06 PM - 5 Feb 2017

45 1.1K 1.7K

 **Rogue J. Bigham**  @jeffbigham · Mar 12  
Replying to @AndrewYNg

perhaps. but, arguably, the data is much harder and expensive to collect than developing the algorithms to run on it

3

 **Michiel Trimpe** @mtrimpe · Feb 5  
Replying to @AndrewYNg

And strong data ownership. Google has every search click I ever made... but even though they're mine I can't get those anymore.

3 14


 **David Vandegrift** @DavidVandegrift · Feb 5

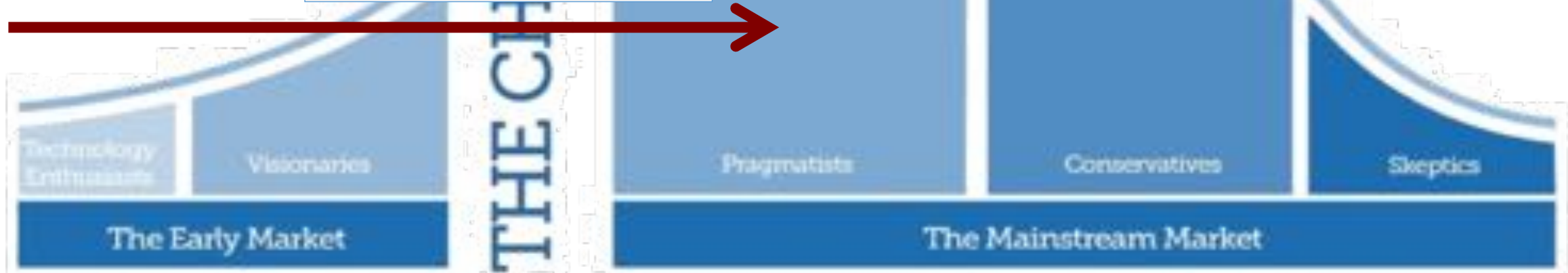


# The Library Link Network

Growing Library Visibility Together/A Zepheira Collaboration

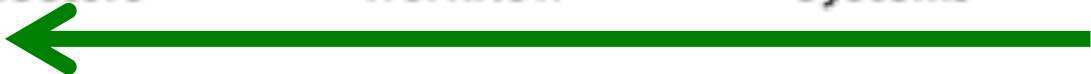


 **Libhub**  
Leading, Learning, and Linking

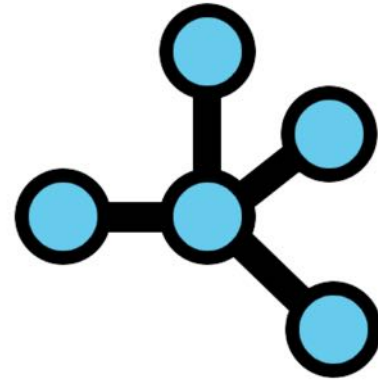


Experimenters      Early Implementers      Data Publishers & Connectors      Mainstream Workflow      Back Office Systems

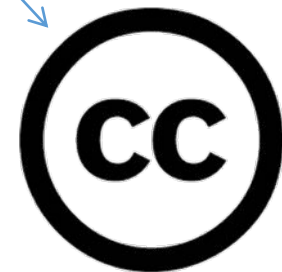
- |  |   |   |   |  |
|--|---|---|---|--|
| <ul style="list-style-type: none"> <li>Clarify Space</li> <li>Determine the Need</li> <li>Define a Foundation</li> <li>Draft Specifications</li> </ul> | <ul style="list-style-type: none"> <li>Test the Assumptions</li> <li>Draft Standards</li> <li>Evaluate Data, Processes, &amp; Gaps</li> </ul> | <ul style="list-style-type: none"> <li>Begin to work at scale</li> <li>Use other's data</li> <li>Participate - Publish, Share, Connect</li> </ul> | <ul style="list-style-type: none"> <li>"Final" Standards &amp; Best Practices</li> <li>New businesses and models</li> </ul> | <ul style="list-style-type: none"> <li>"There's Linked Data in there!?"</li> </ul> |
|--|---|---|---|--|



Transform



Schema.org



# Outreach

External

Web  
Community  
Partners

Internal

Library  
Programs  
Social  
Catalog



# Control

Hands Free

Published Content  
Syndication Program  
On/Off Config

Hands On

Search  
Embed  
APIs





# Access

Organic

Harvest  
Browse

Direct

Embedded Data  
Query APIs  
Feeds



# Partnerships

Formal



Contracts  
Keys  
Feeds  
Specs

Informal



Policies  
Access  
Social



# Measurements Without Compromise

Intelligence

Privacy



Metrics  
Outreach  
Logs  
Standard/Portable

No Patron Data  
No Third Party



# The Library Link Network

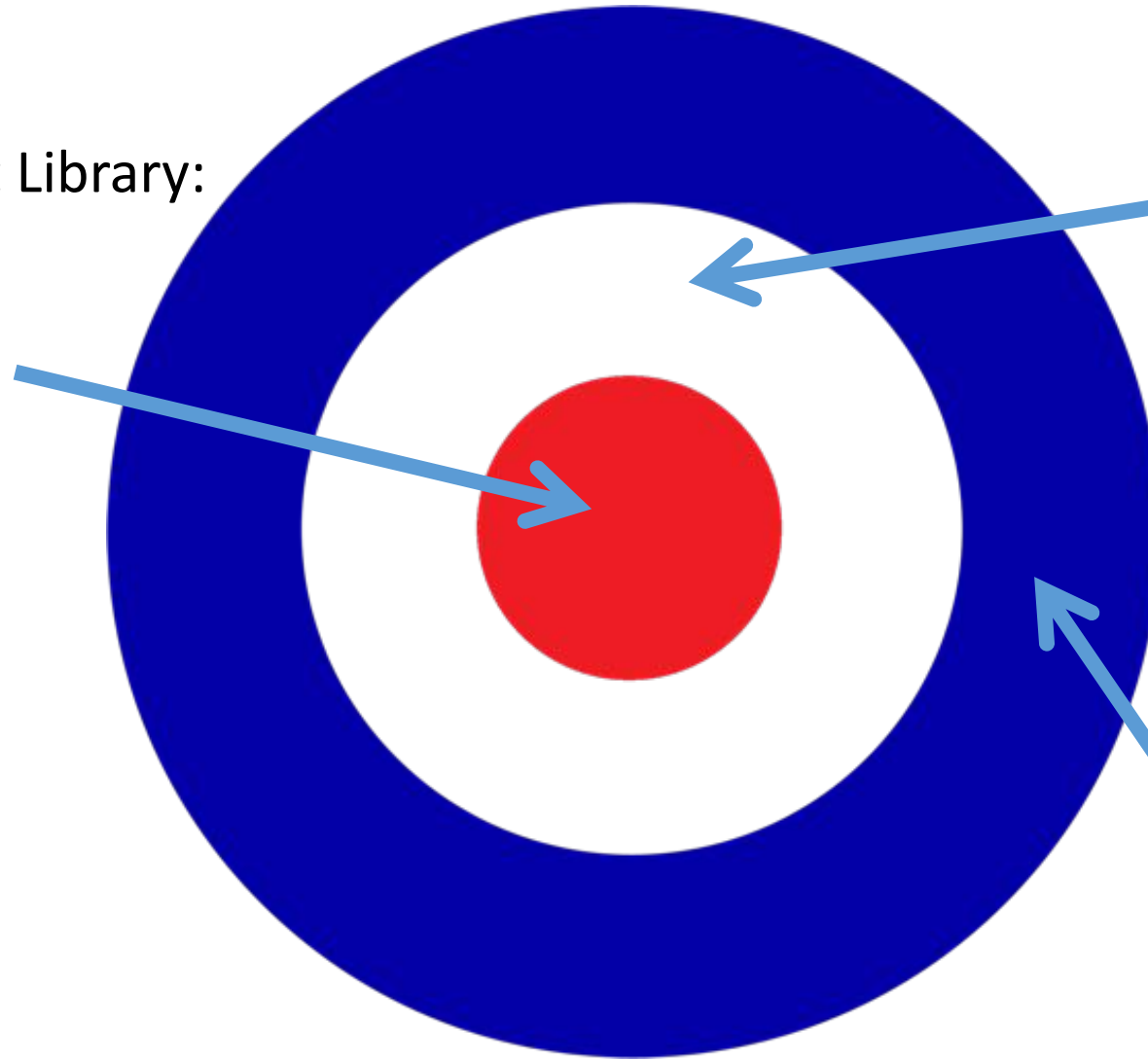
- Helping libraries become “data native”
- Telling individual and shared stories
- Connecting via the Network



# Precision of Targeting and Control

## 1. Direct Use at Library:

- Website
- Catalog
- Social



## 2. Direct Use in community:

- Schools
- Theater
- Government
- Personal

## 3. Direct & Organic:

- Harvesters
- Syndication Partners

# Engaging with your communities and measuring impact



Blogs, newsletters



Web Presence



Bulletin Boards, Flyers, Newspaper, Coffee Shops



Social Media



Community Outreach, Education, Senior Living



Bookmobiles and Pop-up/Embedded Staff



Find



Impression

Use



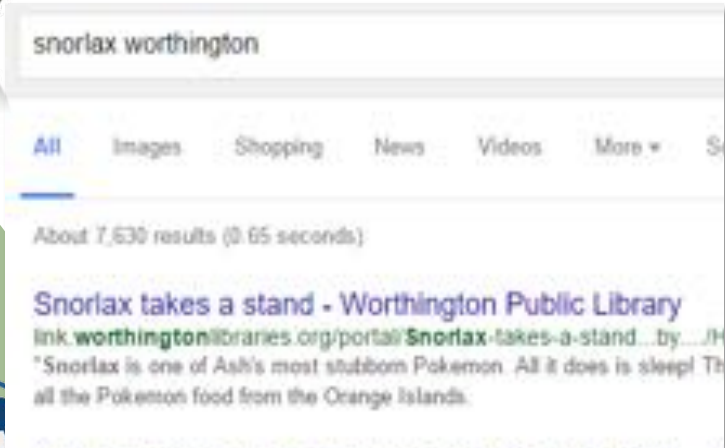
Measure



Harvest

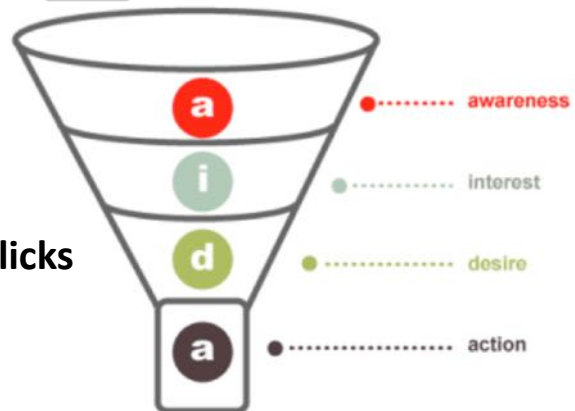


Search Index



Impressions

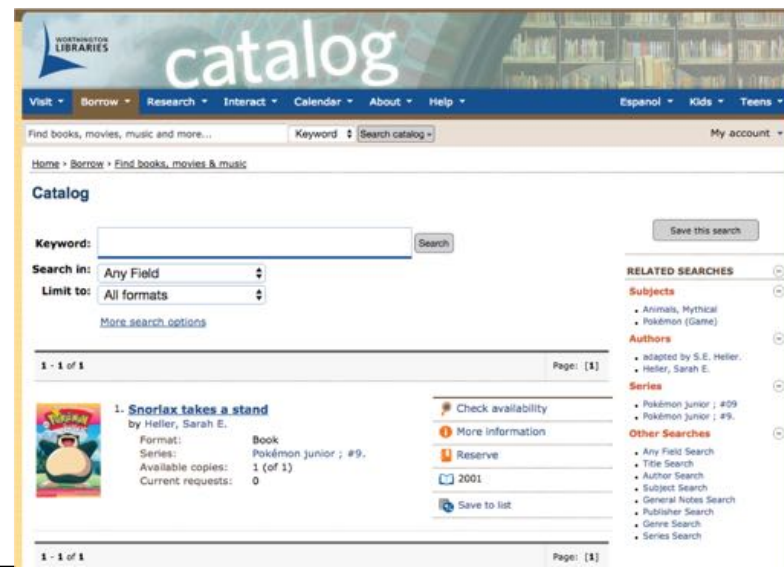
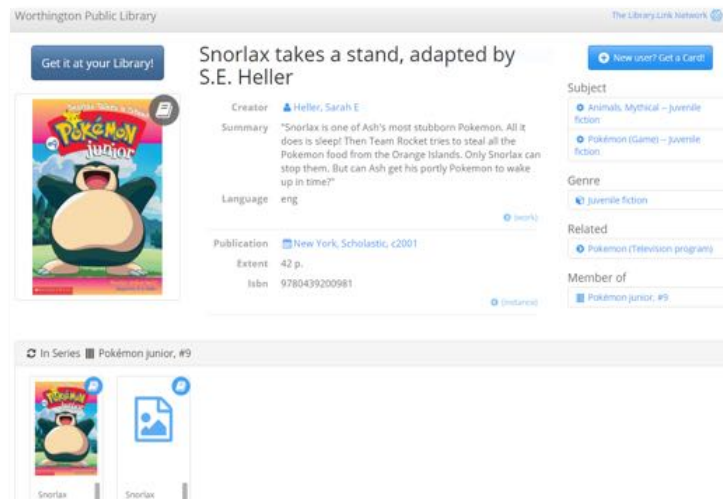
Clicks



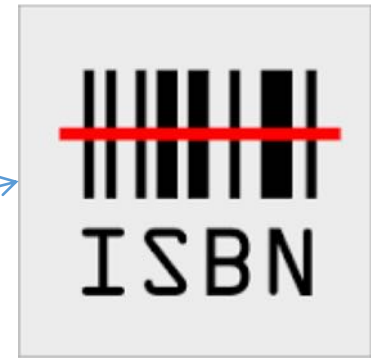
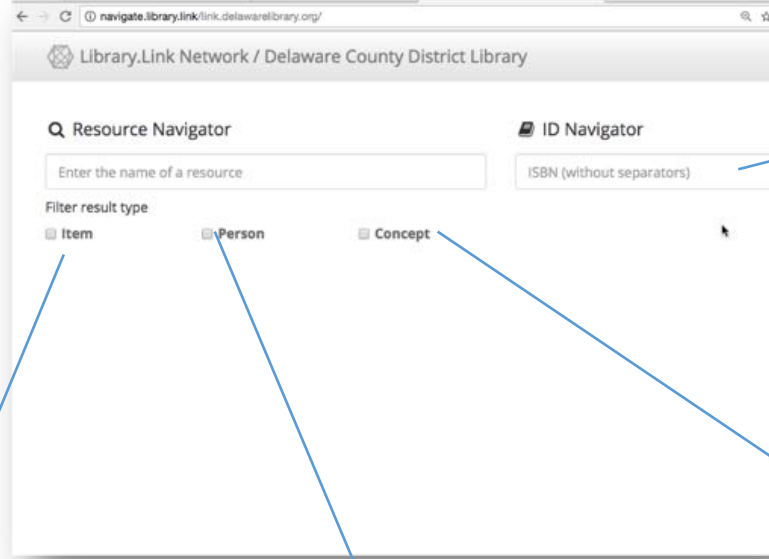
Library Website/  
Discovery

Library

Clicks



Find



Identifier



Items



Person



Concepts



Use

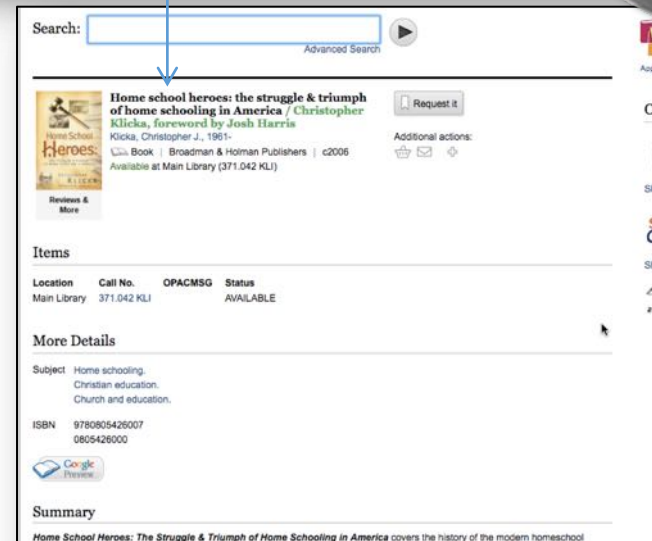
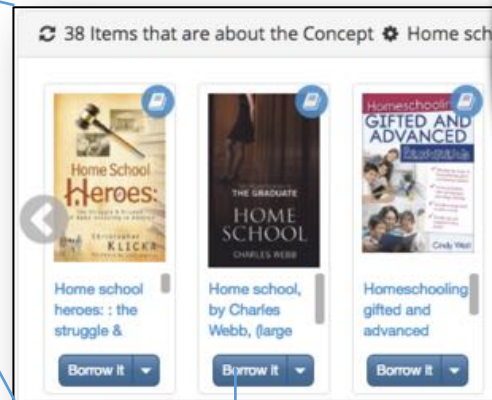
# Embeddable Living Data



- Reflects current collection
- Saves staff time
- More patron connections to library content & context

## Examples:

- Items, Series, Concepts
- New York Times Bestsellers



Connect to the Library's Discovery & Fulfillment



**Events**  
Author Visits, Book Clubs,  
Professional Development

**Blogs and News Items**  
Recommendations,  
Featured Titles,  
Current Events  
Upcoming Films/Books

**Outreach**  
City Government, Local Arts,  
Local News, Historical Society

Cuyahoga County Public Library

Home Branches Borrowers Kids & Teens Donate

My Account

Events > Event Detail

**Meet Author Brad Ricca**

Monday, March 13, 2017, 7:00 PM

Location: South Euclid-Lyndhurst Branch

Audiences: Adults

Event Type: Author

Brad Ricca will visit... literary biography... society life and be... allowed to vote... Brad is a SAGES... *Adventures of J...*

Books will be a...

3 item(s)

- Mrs. Sherlock Holmes : Murder, Slave Trafficking, and the Unlike Story of Mrs. Grace Humiston, Special Civilian Investigator to the York City Police Department
- Mrs. Sherlock Holmes : Murder, Slave Trafficking, and the Unlike Story of Mrs. Grace Humiston, Special Civilian Investigator to the York City Police Department
- Super boys : the amazing adventures of Jerry Siegel and the creators of Superman, Brad Ricca

Statement Collection #4	Statement Collection #5
<b>Entity</b>	<a href="http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU">http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU</a>
<b>Attributes</b>	
<a href="#">rdf:type</a>	<a href="http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU">http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU</a>
<a href="#">rdf:type</a>	<a href="http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU">http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU</a>
<a href="#">rdf:type</a>	<a href="http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU">http://link.cuyahogalibrary.org/resource/aSWGM3MkLPU</a>
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**REGISTER**

KLINT FINLEY BUSINESS 04.04.17 07:00 AM

SHARE



# TIM BERNERS-LEE, INVENTOR OF THE WEB, PLOTS A RADICAL OVERHAUL OF HIS CREATION



About 146,000 results (0.73 seconds)

**Westerville Public Library: Home**[www.westervillelibrary.org/](http://www.westervillelibrary.org/)

Browse for free books, eBooks, movies &amp; music, check library hours, register for storytimes, book meeting rooms &amp; more.

**Events**

Things to do in Westerville, Ohio. Events, classes &amp; storytimes for ...

**Hours**

Hours. Main Library &amp; Drive-Thru. Sunday: 1pm - 5pm. Monday ...

**Books**

Find your next favorite read by browsing the library's new and ...

[More results from westervillelibrary.org](#)**About Us**

Learn about the Westerville Public Library's mission, core values ...

**Movies**

Browse for movies on DVD or Blu-ray. Find bestsellers, classics ...

**Careers at the Library**

Find out about job openings at the Westerville Public Library.

**Westerville Public Library - Wikipedia**[https://en.wikipedia.org/wiki/Westerville\\_Public\\_Library](https://en.wikipedia.org/wiki/Westerville_Public_Library)

The Westerville Public Library is a public library that serves the community of Westerville, Ohio, a suburb of Columbus, Ohio. As a school district library, its geographic boundaries are defined by the Westerville City School District (Franklin County, Ohio) which straddles both Franklin County and Delaware County, All Ohio ...

Location: Westerville, Ohio Budget: \$7,818,000  
Staff: 125 Population served: 92,603**Westerville Library (@westervlibrary) | Twitter**<https://twitter.com/westervlibrary?lang=en>The latest Tweets from Westerville Library (@westervlibrary): Located in uptown Westerville, Ohio. Stop in to browse books, attend events & enjoy free wi-fi. Call 614-882-7277 or email [ask@westervillelibrary.org](mailto:ask@westervillelibrary.org). Westerville, OH.**Working at Westerville Public Library | Glassdoor**<https://www.glassdoor.com/.../Working-at-Westerville-Public-Library-E1E928184.1...>

Rating: 4 - 2 reviews

See what employees say it's like to work at Westerville Public Library. Salaries, reviews, and more - all posted by employees working at Westerville Public Library.

**Books, building damaged as water heater fails at Westerville Public ...**<https://www.fox.com/.../books-building-damaged-water-heater-fails-westerville-publ...>

Mar 15, 2019 - The Westerville Public Library has closed the children's and teen areas until further notice due to an overnight water heater failure Friday.

**Westerville Public Library to close Friday to allow staff to attend officers ...**[www.fox41.com/local-news/westerville-public-library-to-close.../1096348986](http://www.fox41.com/local-news/westerville-public-library-to-close.../1096348986)

Feb 13, 2019 - WESTERVILLE (FOX41) - Westerville Public Library will be closed on Friday, Feb. 15, to honor fallen officers Tony Monelli and Eric Joering. Officer Monelli worked special duty at the library as a security monitor for more than 20 years. In a statement, the library said Officer Monelli believed working

**Westerville Public Library**
[Website](#)
[Directions](#)
[Save](#)

4.7 ★★★★★ 65 Google reviews

Public library in Westerville, Ohio

The Westerville Public Library is a public library that serves the community of Westerville, Ohio, a suburb of Columbus, Ohio. Wikipedia

**Address:** 126 S State St, Westerville, OH 43081**Hours:** Open - Closes 9PM +**Phone:** (614) 882-7277**Founded:** 1930**Budget:** 7.818 million USD[Suggest an edit](#)**Know this place?** Answer quick questions**Questions & answers**

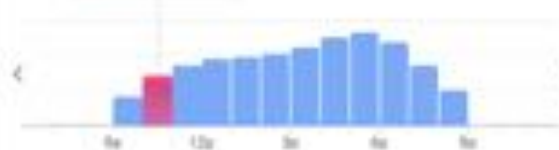
Q: Do you have any books on Santa Clara black pottery?

[Ask a question](#)

A: Great question. Have you searched the catalog online?

[See all questions \(9\)](#)**Popular times**[Tuesday 2](#)

A little busy

**Plan your visit**

People typically spend up to 1.5 hours here

## 'Ready Player One': 16 Key Differences Between Book and Movie ...

[www.indiewire.com/2018/03/ready-player-one-differences-book-movie-1201943145/](http://www.indiewire.com/2018/03/ready-player-one-differences-book-movie-1201943145/)

Mar 28, 2018 - Ernest Cline's bestselling novel "Ready Player One" takes America's obsession with pop cultural references, the unstoppable push of technology, and an unlikely hero and combines them all up into a single vivid story. The movie doesn't exactly require its audience to know the ins and outs of "Dungeons ...

### People also ask

What does IOI stand for in Ready Player One?

What does Oasis stand for in the book Ready Player One?

What is a Gunter in Ready Player One?

Who published Ready Player One?

Feedback

## Ready Player One Book Review - Common Sense Media

<https://www.commonsensemedia.org/book-reviews/ready-player-one>

★★★★★ Rating: 5 - Review by Michael Berry

Exciting, funny, futuristic thriller about online games. Read Common Sense Media's Ready Player One review, age rating, and parents guide.

## Ready Player One by Ernest Cline | Book of the Month

<https://www.bookofthemonth.com/ready-player-one-175>

This book perfectly predicts the world's future in 2044. Or, more precisely: assuming we're all going to be spending our waking hours plugged into a virtual reality video game solving puzzles in search of the key to control of the internet, it'll probably play out just the way this book says. Ready Player One is a fantastical trip ...

## 11 Ready Player One Secrets We Learned From Ernest Cline, Feature ...

<https://www.empireonline.com/.../11-ready-player-one-secrets-learned-ernest-cline/>

4 days ago - We spoke to Ernest Cline, author of the novel and co-writer of the screenplay, to go in-depth on the major revelations, hidden easter eggs and changes from the book to the screen for a Ready Player One Spoiler Special podcast - and he teased out plenty of juicy details. If the word 'spoiler' didn't clue you ...

Review: Spielberg's 'Ready Player One' Blows the Nostalgia Cans

## Buy ebook

 Google Play Books	From \$9.99
 Barnes & Noble	From \$9.99
 iBooks	From \$9.99
 Kobo	From \$9.99

## Borrow

Check availability at libraries near you

Enter a city or zip code



No results found near you. Try another location.

## Critic reviews

Layered with inside jokes and sly references that will appeal to a wide range of readers, "Ready Player One" is a smart, funny thriller that both celebrates and critiques online culture. [Full review](#)



Michael Berry  
Common Sense Media

## People also search for

View 45+ more



Armada: A Novel  
Ernest Cline



Snow Crash  
Neal Stephenson



A Wrinkle in Time  
Madeleine L'Engle



Ender's Game  
Orson Scott Card



The Martian  
Andy Weir

Feedback



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(Bookshare)



JSTOR



Comics Plus  
Trend



KutList



Kobo



Kortext



Library Lingo  
(Freeing)



BookShout!



Bowker



Brain Hive



BryteWave (Follett)



Chegg



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Logix Canada



Mazin



Meredith  
Catalog



ODLO



OverDrive



Cenfinity



Copia



Credentia ( Ingram)



Daxxon



Douglas County



Ebooks.com



Finnish Board



Foyler



Frontier Humana



ProQuest



Read How You Want



RedShelf



EBSCO



Erie (Clarke)



Epic



Findaway -  
Audiobook Vendor



Forest Digital  
Resources



Gardner's



Sensory  
Entertainment



Scribd



Shelfie by Brill



Scribebooks



TextOneQuest



Total BookX



VitalSource (Ingram)



Whisper



ZOLA

With library resources accessible via published Linked Data, the Internet Archive can provide recognized reach to new audiences.

The screenshot displays the website for the Delaware County District Library (Ohio). The header includes the library's logo, name, and a brief description: "The Delaware County District Library (DCDL) and its branches are vibrant centers of activity for residents and visitors in Delaware County. DCDL provides an inviting environment that encourages MORE". Navigation links for "ABOUT" and "COLLECTION" are visible. The "COLLECTION" page shows 46,789 results. A search bar is present, along with a "PART OF" filter set to "American Libraries". The "Media Type" filter is set to "Items" with 46,789 results. The "Availability" filter shows "Available to Borrow" (41,473), "Waitlist" (5,064), and "Always Available" (253). The "Topics & Subjects" filter includes "Fiction" (2,377), "Man-woman relationships" (1,052), "Large type books" (1,001), "Schools" (864), "Police" (864), and "General" (784). The main content area features a grid of book covers, including "Latina es poder!", "AND LADIES OF THE CLUB", "SUE GRAFTON 'A' IS FOR ALIBI", "BURGLAR", "BOOTS AND SADDLES", "Oh My Gosh, Mrs. McNosh!", and "Excuse Me, ...". A navigation bar at the top of the collection area includes letters A-Z and sorting options: "SORT BY", "VIEWS", "TITLE", "DATE PUBLISHED", and "CREATOR".

data.world delivers modern data tools and data sets for local and comparative analysis of libraries, collections, coverage, and communities.



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We are building the most **meaningful, collaborative, and abundant** data resource in the world.

Open Secure Social **Linked**



It should be easier to find, understand, and use data. We make data "meaningful" using Semantic Web technology. This improves data discovery and interoperability so people and machines can unlock its value faster. We've built a network where new datasets energize and enhance everything they connect to.



### Find fantastic data.

Discover the data you need.  
Understand it at a glance.  
Follow people, topics, and projects.



### Add data from any source.

Make it open or keep it private.  
Include docs, scripts, charts, and more.  
Query within and across datasets.



### Collaborate with others.

Find project contributors.  
Invite your network.  
Discuss data in context.



# Purpose Driven, Audience Focused

