# Looking to the Mobile Future in Teaching & Learning: Making a Commitment or Observing from the Sidelines

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COALITION FOR NETWORKED INFORMATION
HTTP://WWW.CNI.ORG/ABOUT-CNI/STAFF/JOAN-K-LIPPINCOTT/

#### 5<sup>TH</sup> INTERNATIONAL M-LIBRARIES CONFERENCE

THE OPEN UNIVERSITY (UK) & THE CHINESE UNIVERSITY OF HONG KONG MAY 29, 2014



## Coalition for Networked Information (CNI)

Non-profit association

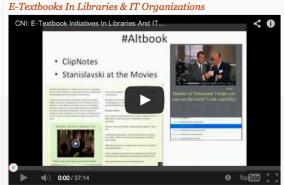
Joint program of ARL and EDUCAUSE

Bridging library/IT interests in the digital environment

www.cni.org



ABOUT CNI ▼ PROGRAM PLAN ▼ BROWSE BY TOPIC MEETINGS & EVENTS ▼ RESOURCES ▼



Speakers from UIUC, Purdue, & UCLA discuss ongoing work in libraries & IT organizations re. textbooks and instructional resources in general. This talk was given at the spring 2014 CNI member meeting, held March 31-April 1 in St. Louis, MO.

#### About CNI

The Coalition for Networked Information (CNI) is dedicated to supporting the transformative promise of digital information technology for the advancement of scholarly communication and the enrichment of intellectual productivity. Some 220 institutions representing higher education, publishing, ... [Read More...]

#### Latest News

Video: Center of Excellence Model MAY 20, 2014

"Digital" Scholarship Disconnect, by Cliff Lynch MAY 19, 2014

Learning Spaces Collaboratory Webinar "What Works" 6/23/14 MAY 19, 2014

Call for Applicants: Paul Evan Peters Fellowship for Information Studies MAY 15, 2014

Read all news

#### **Upcoming Events**

Jun 9, 2014 - Jun 13, 2014 Open Repositories 2014

Jul 10, 2014 - Jul 10, 2014 Jisc/CNI 2014 Conference

Sep 22, 2014 - Sep 26, 2014

#### Saving Ebooks

Read Cliff Lynch's comments on ebook stewardship in this article from *The Verge*.

#### **Quick Links**

CNI Meetings

Cliff Lynch: Talks & Interviews

Publications by CNI Staff

Members

Event Calendar

Videos & Podcasts

## Libraries in the Mobile Environment – My Focus

- Libraries working on innovation with the curriculum
- Library involvement in developing new educational content
- Innovative services meeting contemporary students' style
- Strategies for putting resources into mobile technology and content development

## I. Use of mobile devices in coursework

#### • Motivations:

- o Enable mobility, fieldwork, work from remote sites
- Integrate a variety of resources conveniently on one portable device
- Promote active learning
- Enable students to become practitioners of the discipline, especially in fields like health care
- Encourage student content creation, especially in multi-media

## The versatility of tablet devices

- State of Tennessee
- Use iPads to:
- Create presentations, e-books, digital stories, videos, written materials, mind maps
- Develop skills reading, research, note taking, develop portfolio



http://emergingtech.tbr.edu/15-ipad-skills-every-students-should-have

## Are we ready for tablets at the university?

#### Yes

- "Students are ready to use their mobile devices more for academics" (ECAR Undergraduate Students 2013)
- "30% of e-content consumers are reading more now because e-content is available on new devices 41% for tablet owners" (Pew Research Center, 4/10/14
- Students prefer smartphones and laptops to tablets (Ball State U. study reported in CHE 4/25/14)
- Students prefer print textbooks to e-textbooks (Many studies)

## A holistic institutional approach

- "Fresno State is embarking on a bold student tablet initiative aimed at facilitating student success in content mastery and to build technology skill sets. We're looking to redesign how we deliver support services to achieve this goal. The redesign would seek to integrate currently disparate support functions"
- IT help desk
- Teaching & Learning help desk
- Library (digital literacy & research, tablet check-out)
- Bookstore

## What is your perspective?

#### **Institution-centered**

- What are new teaching/learning initiatives that can utilize mobile devices/ content?
- How can the library enrich student learning within the curriculum?

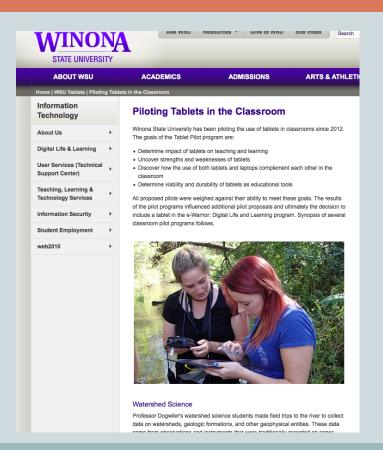
#### Library-centered

 How can the library provide its services to users of mobile devices?

## Classroom tablet program



#### Winona State U.



#### **News360**

## How does News360 work with publishers?

If you create content, chances are your feeds are already in News360, and we're channeling our users to your site (you may have seen referral traffic from us already!) If you can't find your content in the app, then send a link to your RSS feed to publishers@news360.com and we'll add it to News360 — it's as simple as that. For larger publishers, we have what we call our News360 Publisher Partners program.

## What does being a News360 Publisher Partner provide?

News360 Publisher Partners get more insight into readers that view their content in News360, additional branding on their content pages, and the ability to monetize their own content through our Promoted







**BUSINESS INSIDER** 



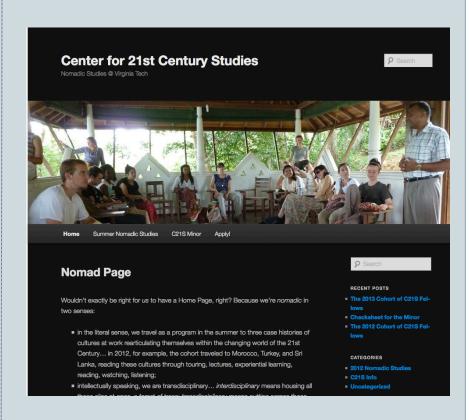
**GIGAOM** 

http://news360.com/publishers/

## Curricular innovation with iPads at Virginia Tech



http://www.vtnews.vt.edu/articles/2014/04/042514-univlib-digitalhistory.html



https://blogs.lt.vt.edu/c21s/

## Supporting researchers in the field

- University of Guelph (Canada)
- Entomologist in Viet
   Nam collecting data
- Political scientist in Ecuador – interviewing
- Library providing advice on research data infrastructure and management



http://www.cni.org/topics/mobile-technologies/f13-johnston-mobile/

## Crowdsourcing: citizen science



Invasive species are a threat to native plants and animals, crowding natives, consuming food sources, or acting as fire hazards. We have found that having groups such as schools run short-term "campaigns" is highly effective for locating invasive species. Join the fight against invasive species!



Use your **Android** or **iPhone** to help us locate invasive species!

Step 1. Sign up

**Step 2.** Get the <u>iPhone</u> app or the Android app.

Step 3. Start collecting!

Find out how you can <u>set up your own site</u> so people can help in your area!



Select a Participating site:

Or set up your own site!

All Parks

▼ Go there!

There are currently 303 registered users who have contributed 11542 observations of 224 invasive species in 115 active sites!







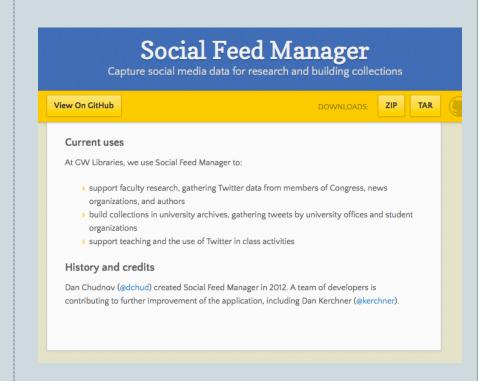


## George Wash. U. Supporting Twitter Research

http://www.cni.org/topics/social-media/f13-chudnov-capturing/

http://gwu-libraries.github.io/ social-feed-manager/

- Supports faculty research, gathering Twitter feeds from Congress and news organizations
- Collects tweets from university and student organizations for the Archives collection
- Supports teaching and use of twitter in class activities
- Developed by GWU library



## II. Developing content for mobile devices

### **SUNY Open Textbooks**

## 3 projects at CNI meeting



E-Textbooks In Libraries & IT Organizations

Coalition for Networked Information

E-Textbook Initiatives In Libraries And IT Organizations

Glenda Morgan, University of Illinois at Urbana-Champaign
Pat Reid, Purdue University

Todd Grappone, University of California, Los Angeles
Millind Basole, University of Illinois at Urbana-Champaign

Coalition for Networked Information (CNI)
Spring 2014 Membership Meeting
March 31 - April 1, 2014
St. Louis, Missouri

For more information, visit http://www.cni.org

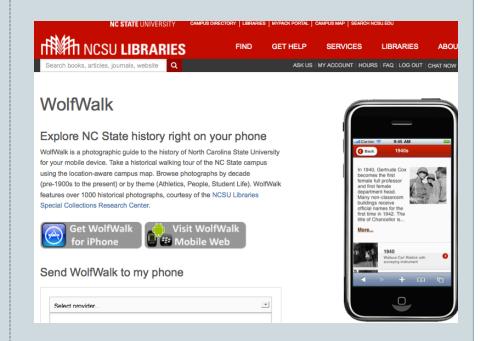
http://www.youtube.com/watch?v=VY\_Y8Z5MaH4&feature=youtu.be

## Linking smartphones to local content

#### **Goethe & Pratt Institutes**

#### NC State U. Library





http://www.germantracesnyc.org/

http://www.lib.ncsu.edu/wolfwalk/

## Libraries are leveraging geo-spatial capabilities with local information

- TagWhat
- Virginia Beach PL, National Trust, and others
- Users experience the "hidden stories" of places they are visiting
- Historic photos, video, and audio are connected to places
- "The library's kind of like an iceberg; we have all this cool stuff that nobody ever sees or knows how to get to," Hart said. "What we're trying to do now is tell people, and we're using this augmented reality app to do it."
- http://hamptonroads.com/2011/08/app-virginia-beach-city-history

## Augmented reality app reveals the world's hidden stories

Now available for iPhone 3GS/4 and Android, Tagwhat's "Great Stories at Places" app aims to let users experience hidden stories everywhere they go.



5th August 2011 in Lifestyle & Leisure

Much the way Walkabout3d uses augmented reality to provide a glimpse into the future of new building developments, so Colorado-based Tagwhat offers a look back into the past by revealing the stories associated with different geographical places.

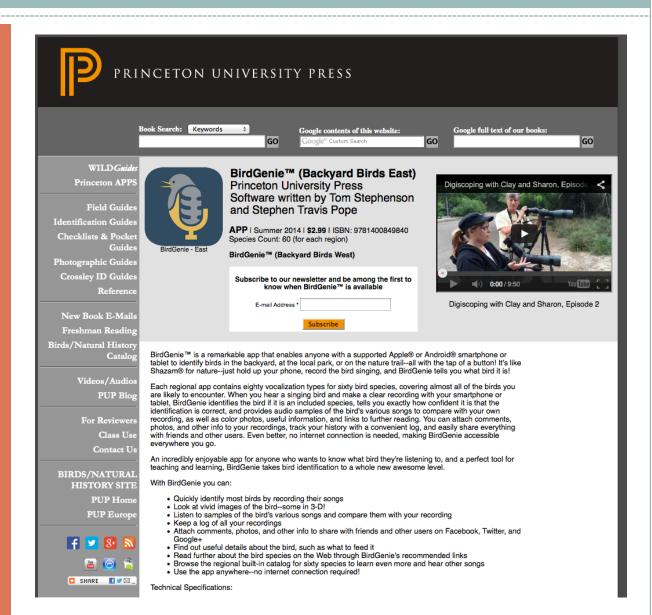
Now available for iPhone 3GS/4 and Android, Tagwhat's "Great Stories at Places" app aims to let users experience hidden stories everywhere they go. The company's team of new media journalists and filmmakers have amassed thousands of original and curated stories told in words, images, video and audio, supplemented by publishing partners including the Associated Press, the National Trust for Historic Preservation and the Virginia Beach Public Library system. Stories describe and enhance the places around the user, and are organized into channels focusing on topics such as music, food, nature and art. They pop up on top of real-life locations when users look through their phone's camera, changing based on what they're looking at. A unique digital postcard is even associated with each story, allowing users to personalize it and send it to friends via Facebook, Twitter or email. For armchair tourists, meanwhile, a "Visit" feature lets users travel virtually to

#### BirdGenie

App sold through a university press

Record a bird's song and the app will identify it for you

Also provides audio samples and photos



## New types of reference tools are being developed

- Leaf snap app
- An electronic field guide
- Take a photo; app helps identify species
- Uses techniques built on face recognition
- Developed by U.
   Maryland, Columbia U.,
   & Smithsonian



http://leafsnap.com/

## III. New Modes for Services

#### NC State U.

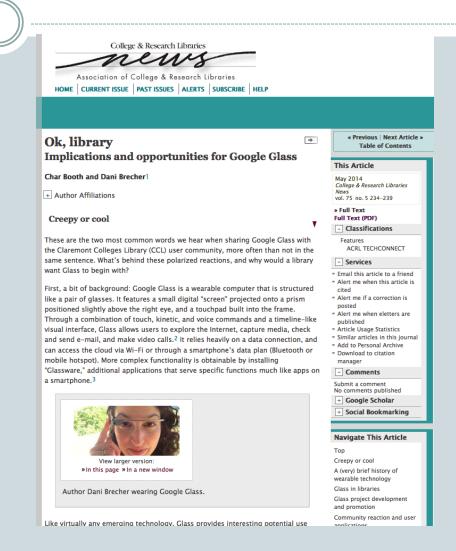
#### **U. Houston Downtown**





## Google Glass in the Library

- A computer science major commented on the loaning of Google Glass by the library at Claremont University Consortium:
- "I think it's going to change the way we relate to information," he said. "It's a device that needs to be experienced and not described, and one demo unit is a step in the right direction."



### **Google Glass**

**UC** Irvine

**Medical School** 

Will be incorporated into anatomy labs, medical simulation center, ultrasound institute, clinical skills center, and basic science lecture hall

#### UCIRVINE News



Steve Zylius/UC Irvine

Dr. Warren Wiechmann, assistant clinical professor of emergency medicine and associate dean of instructional technologies, will oversee implementation of the Google Glass four-year program at UCI. Download image

## **UCI School of Medicine first to integrate Google Glass** into curriculum

Wearable computing technology will transform training of future doctors

Irvine, Calif., May 14, 2014 — As physicians and surgeons explore how to use Google Glass, the UC Irvine School of Medicine is taking steps to become the first in the nation to integrate the wearable computer into its four-year curriculum – from first- and second-year anatomy courses and clinical skills training to third- and fourth-year hospital rotations.

Leaders of the medical school have confidence that faculty and students will benefit from Glass's unique ability to display information in a smartphone-like, hands-free format; being able to communicate with the Internet via voice commands; and being able to securely broadcast and record

 $\frac{\text{http://news.uci.edu/press-releases/uci-school-of-medicine-first-to-integrate-google-glass-into-curriculum/?utm\_content=buffer5f6ca&utm\_medium=social&utm\_source=facebook.com&utm\_campaign=buffer$ 

## **Telepresence Robot**

Mobile reference

Visits to classes, labs by librarians



Flickr.com Photo by Anders Sandberg CC BY-NC 2.0)

#### **Chat Robot**

Tsinghua University Library

#### 机器人小图为您服务! ~~小图诞生记~~~下载安卓版小图~

Me: (2014-05-28 10:14:33)

help

小图: (2014-05-28 10:14:33)

你好,我是清华大学图书馆智能机器人小图,我有一些特殊的功能:

发送help获得帮助

特殊命令:

teach: 获取教小机器人问答的方法

baike:查询百度百科

book:图书馆搜索书籍、资料

搜书格式如下:book 关键字

#### 热门问题推荐

机器人小图使用说明

有关图书馆的问题向谁咨询 如何向图书馆推荐购买新书

图书馆开馆时间

如何查找学位论文

如何查找会议论文

如何查找专利文献

如何查找科技报告

总咨询台电话号码和服务时间

清华大学校庆是哪天

book 三体

baike 清华大学

我可不可以让你变得更聪明

你听过忐忑吗





## Mobile technology research for people with impairments

## **University of Maryland**

## iSchool students part of the team

Inclusive Design at Maryland's HCIL

#### Welcome!

We're an interdisciplinary group of researchers at the University of Maryland focused on making the next generation of computing technology more accessible. We work primarily on mobile and wearable technologies for people with motor or visual impairments, older adults and children. We're part of the larger Human-Computer Interaction Lab (HCIL).









#### **Projects**

An overview of our active research We're always looking for new projects.

#### **Participation**

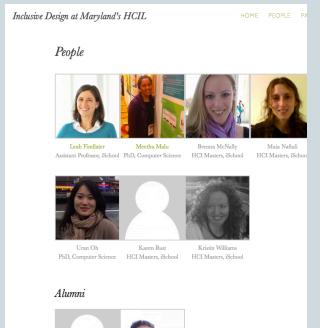
participants and partners. Come join us!

#### **HCIL**

Learn more about the Interaction Lab.

#### Funding sources

Current: NSF (CAREER 2014-2019), Nokia (2013-2014), Samsung (2014) Past: Google



Chris Imbriano

College

http://inclusivedesign.umd.edu/

## Mobile technology research for people with impairments

- Signglasses
- Developed at Brigham Young University
- Projects a sign language interpreter on the glasses
- Students involved in project development
- Working with Georgia Tech on additional application tying a dictionary to glasses to provide definitions for words found in books



## IV. Going forward at your institution

- Know your users
- Kent State U. Library survey
- "In every focus group, we heard the same thing: students were not only interested in getting basic information from a mobile web site, they also desired greater interactivity... and envisioned being able to read, chat, and connect to resources...they expressed a desire for a customizable experience and found design to be very important."
- Seeholzer & Salem, "Library on the Go." C&RL v.27, No. 1, Jan., 2011, p. 18

- Know your users
- U. Texas San Antonio Library
- Used their Music Online collection to create playlists
- Marketed through
   Facebook and accessed
   via QR codes
- Usage increased 41% in month of campaign
- http://link.higheredweb.org May 15, 2012

## Partner to gain expertise

- Professional institutional partners
  - Information technology
  - Center for teaching & learning
  - Instructional technology
  - University press
- Partnering with students
  - Hiring highly qualified students part-time
  - Developing contest for apps



## Making a commitment or sitting on the sidelines

#### Advice from Tim Flood, one of the developers of iStanford:

"The mobile environment is just not going to make a stop so you can take your time getting on the bus. You have to accept continual development and change surrounding the industry and mobile applications, and adapt...

These two mantras we've had for a long time in higher education wait for standards and plan ahead on all aspects of your project--served us very well in other contexts, but not here, now, today, with mobile.

The technology change we face today challenges us to re-examine how we think and act as we begin our mobile projects...

I think the single biggest gift that an institution could give itself in terms of mobile, would be simply to "dive in." Do something quickly. Do something of consequence without really trying to think it through to every last detail... So when we're considering an institution's willingness to explore mobile technology, I'd keep this broader perspective in mind:

We're not just talking about implementing technology!

We're ultimately talking about an institution's identity, its image, its perceived relevance--and perhaps its survival."

http://campustechnology.com/Articles/2012/04/18/Mobile-Relevance.aspx?=CTCLV&p=1

#### Contact:

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www.cni.org

http://www.cni.org/ about-cni/staff/joan-klippincott/



## Thank you! Joan talking with Bryan Alexander (telepresence robot) at ELI Conference 2014