Digital Fluencies:
A Story of Trials & Triumph

December 13, 2016
kimeke@upenn.edu
Once upon a time, a long, long time ago, you landed in a magical place.
A magical place called Penn Libraries - one of the oldest academic research libraries in the country.
Where you had the good fortune to work w/amazing librarians!
Librarians who were dedicated, hard-working & consummate helpers.
You observed that they were so tireless in their support of faculty & students that they were stretched very thin.
Furthermore, your conversations w/ people outside the library suggested that they didn’t know the magical things happening inside.
You wondered, “How could such a dynamic & vibrant place be so misunderstood?” How did others not see what you saw?
They saw weeds. Old notions. Outdated ideas & services. What was going on?
You pondered. And at this fortuitous moment, you & I met.
I couldn’t help you answer all of your questions, but I could give you a window into our instruction. We taught a LOT of workshops.
Canvas Office Hours
Canvas Basics
Assessment and Grading in Canvas
Respondus Browser
BlueJeans Video and Web Conference
Introduction to Google Apps
Google Analytics for Social Media
LinkedIn for Undergraduates
Introduction to APIs: Flickr and Tumblr

NVivo
NVivo Advanced Queries
NVivo for Literature Reviews

Maker Space Event: Calendar Planning
Introduction to 3D Printing
Intro to SketchUp
Intro to solidworks
Introduction to Latex
Introduction to Matlab
Differential and Integral calculus with Matlab

PowerPoint Basics
Audio and Video in PowerPoint
Prezi
Excel Basics
Excel Charts
Excel Formulas and Functions
Excel Pivot Tables
Excel office hours

Unexpected Discovery: Serendipity in the Research Process
Controlling Scholarship: Using Copyright
Making Your Research Discoverable: Metadata, Scholarly Commons, Academia.edu and Researchgate

Faculty Active Learning Showcase: Increasing Student Engagement Across the Disciplines

Engaging Students Through Technology Lightning Round 2015
Using Metadata in Digital Humanities Research More Effectively
Creating and Describing an Online Exhibit Using the Omeka Platform

Early Books Collective
Tableau for Data Visualization
Simple Mapping Tools
ArcGIS Basics

Synthesizing Sources in a Research Paper
The Editing and Revising Process
Reasoning and Peer Review
Zotero
RefWorks

Ready, Set. Succeed: Unpacking your last exam

WordPress Basics
WordPress Advanced
iBooks Author

Editing Audio for Videos with Adobe Audition
Publishing with Adobe InDesign
Adobe Illustrator Basics

iMovie 10
Video Editing with Adobe Premiere Pro

50 unique sessions per semester
300 sessions/yr
You thought, “Maybe all of this teaching was wearing people out.”
And there were 2 other things you noticed at that time: (1) Reports on literacies + (2) Penn Libraries Strategic Plan
Future Work Skills 2020

- Drivers: skills that are crucial for success and growth
- Key skills: skills that are essential in the future workplace

- Technological literacy
- Information literacy
- Learning skills
- ICT literacy
- Digital scholarship
- Career/Identity management
- Media literacy
- Communication and collaboration

The seven elements of digital literacy:

1. Information literacy
   - Find, interpret, evaluate, manage, and share information
2. Digital scholarship
   - Participate in emerging academic, professional, and research practices that depend on digital systems
3. Learning skills
   - Study and learn effectively in technology-rich environments, formal and informal
4. ICT literacy
   - Adopt, adapt, and use digital devices, applications, and services
5. Career/Identity management
   - Manage digital reputation and online identity
6. Communication and collaboration
   - Participate in digital networks for learning and research
7. Media literacy
   - Critically read and creatively produce academic and professional communications in a range of media

The John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning

Confronting the Challenges of Participatory Culture
Media Education for the 21st Century

Henry Jenkins
with Ravi Purushotma, Margaret Weigel, Katie Clinton, and Alice J. Robinson

MacArthur
"We will expand our focus...to embrace a wide spectrum of digital proficiencies that everyone needs in order to be successful in our changing environment."

"Think ‘library’ and programs to build digital and information fluency will also come to mind."
You recommended we use fluencies as a way to organize & prioritize workshops.
The good news? NMC Horizon Report 2015 identified Improving Digital Literacy as a “solvable challenge!”
The bad news? No agreed upon definitions, standards, curriculum, goals, platforms, or tools. We would have to create our own.
And thus began our modest journey of a thousand miles...
You wisely encouraged us to be expansive in our thinking, take our time, and focus on concepts (not tools).
We followed your advice & held brainstorming sessions with people in & out of the library
Digital Fluencies “Cheat Sheet”

<table>
<thead>
<tr>
<th></th>
<th>Information Literacy</th>
<th>Digital Media Literacy</th>
<th>Digital Pedagogy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>You are fluent in information literacy if you are able to create meaning from existing works by finding, analyzing, and synthesizing information from a variety of sources.</td>
<td>You are fluent in digital media literacy if you are able to understand, produce, and legally distribute digital media.</td>
<td>You are fluent in digital pedagogy if you are able to evaluate and successfully use technologies in combination with physical spaces to support teaching and learning.</td>
</tr>
<tr>
<td><strong>Skills</strong></td>
<td>Competencies are related to:</td>
<td>Competencies are related to:</td>
<td>Competencies are related to:</td>
</tr>
<tr>
<td></td>
<td>• Finding/discovering credible sources of information</td>
<td>• Analyzing a digital object by asking questions about that work’s author, argument, creation process, presentation, and medium of choice.</td>
<td>• Theoretical frameworks of how people learn</td>
</tr>
<tr>
<td></td>
<td>• Analyzing information</td>
<td>• Using digital tools to produce and create digital media.</td>
<td>• Application and evaluation of technologies used for instruction and learning.</td>
</tr>
<tr>
<td></td>
<td>• Evaluating information</td>
<td>• Recognizing the physical and legal limitations, and obligations, associated with disseminating digital media.</td>
<td>• Continued professional development through online networks</td>
</tr>
<tr>
<td></td>
<td>• Creating information</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Disseminating information</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Attributing information properly</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Why it’s important</strong></td>
<td>Quality research and the creation of new knowledge is predicated upon having the competencies above. We should be informed producers and consumers.</td>
<td>Digital media objects are intellectual assets that can be used to create and disseminate new knowledge. We should be informed producers and consumers.</td>
<td>Nearly all courses have some digital component integrated into them but may not take full advantage the affordances of digital tools for improved learning.</td>
</tr>
</tbody>
</table>

We collectively created a “cheat sheet” to serve as a common language for talking & thinking about fluencies.
Collective analysis & brainstorming

What did you notice
- lots of how-to but not much eval in dig ped
  workshop.
- need to focus workshops on a specific objective
- need to keep basics: quality, sequence.
- having higher level workshops is important.

Designing workshop series

Digital Research Methods
- Digital Research Fair at beginning of semester with library staff + possible partners showcasing differed methods.
  Offer workshops based on interest.
  Individual consultations, working sessions, course-integrated instruction.
  Showcase of projects done by participants in the semester.

Digital Research Methods
We were ruthless. Our colleagues were more so!
Make no mistake: This was difficult, frustrating work. Only the hardiest among us survived.
It was a 2-year labor of love.
And then something interesting started to happen...
We started to see fluencies everywhere!
Let's look @ 3 ex. of new services that SEEMED disconnected...
It’s a big info universe out there...
“Most of the time I ended up using things like Google Scholar because I wasn’t given any direction for the research.”
We partnered w/faculty to create media to support research in their courses & disciplines.
Examples Beyond Research Paper

3D models & physical prototypes

Online or in-class debates

Comics & infographics

Data set analysis

Service learning

Maps

There is no limit to creative ways to teach info lit concepts!
we have a recording studio. In the library!
SightDeck

Staff support
Free-of-charge
Open to all
Class of ’65 Collaborative Classroom

- 5 round tables rolling chairs
- Projector per table
- 360° writable walls

We support active learning methods, research, faculty, & students.
“The work we do ahead of time prepares us to more efficiently and effectively put our ideas together as a group...”
This has led to new faculty development opportunities & community events.
Over time, fluencies have become a way to prioritize, organize & communicate our events, instruction, consults, platforms, & services.
We can explain how combos of spaces, services, & workshops all connect to larger topics. It helps provide a holistic picture in a simple way.
People outside the library are starting to understand what we do, why, & how we can help them in new & exciting ways!
And, our fabulous librarians can direct their own professional development interests & activities in ways that are manageable.
We can’t thank you enough for your help!
Offered new series for each fluency

Group debrief 12.15

New marketing

Repurpose new formats

Iterate

Here's where we are now. We'd love to partner w/you or hear if you do something similar.
Thank you!
kimeke@upenn.edu
Confronting the Challenges of Participatory Culture: Media Education for the 21st Century  
(MacArthur Foundation, 2009)  
https://mitpress.mit.edu/books/confronting-challenges-participatory-culture

Future of Work Skills 2020 Report  
(Institute for the Future, 2011)  
http://www.iftf.org/futureworksskills/

From Educational Institutions to Learning Flows  
(Institute for the Future, 2013)  

NMC Horizon Report 2014 - Higher Education Edition  

NMC Horizon Report 2015 - Higher Education Edition  

Framework for Information Literacy for Higher Education  
(ACRL, 2016)  
http://www.ala.org/acrl/standards/ilframework

JISC Developing Digital Literacies (2014)  
http://www.jisc.ac.uk/guides/developing-digital-literacies

Penn Libraries’ Strategic Plan  
https://project.library.upenn.edu/confluence/display/libstratplan/Welcome
CC-licensed images

https://www.flickr.com/photos/yourbartender/1260995338/
https://flic.kr/p/tladb
https://flic.kr/p/5mLR6N
https://flic.kr/p/L9ki7H
https://www.flickr.com/photos/momono/429636711/

https://www.flickr.com/photos/essemw/2461503725/
https://flic.kr/p/ocZPQX
https://www.flickr.com/photos/jessmercer/14890341883/
https://www.flickr.com/photos/widdershins/3970530869/
https://flic.kr/p/9Xt9MP

https://www.flickr.com/photos/jdhancock/5342232908/
https://www.flickr.com/photos/srnejo/11973177354/
https://www.flickr.com/photos/-elleinad/-322841373/
https://www.flickr.com/photos/petroleumjelliffe/71356050/
https://www.flickr.com/photos/eraphernalia_vintage/3428367357/

https://www.flickr.com/photos/shi3andra/4367177627/
https://www.flickr.com/photos/valeriebb/5629950641/
https://www.flickr.com/photos/94006243@N08/15406751218/
https://www.flickr.com/photos/jeffkrause/7292606362/