



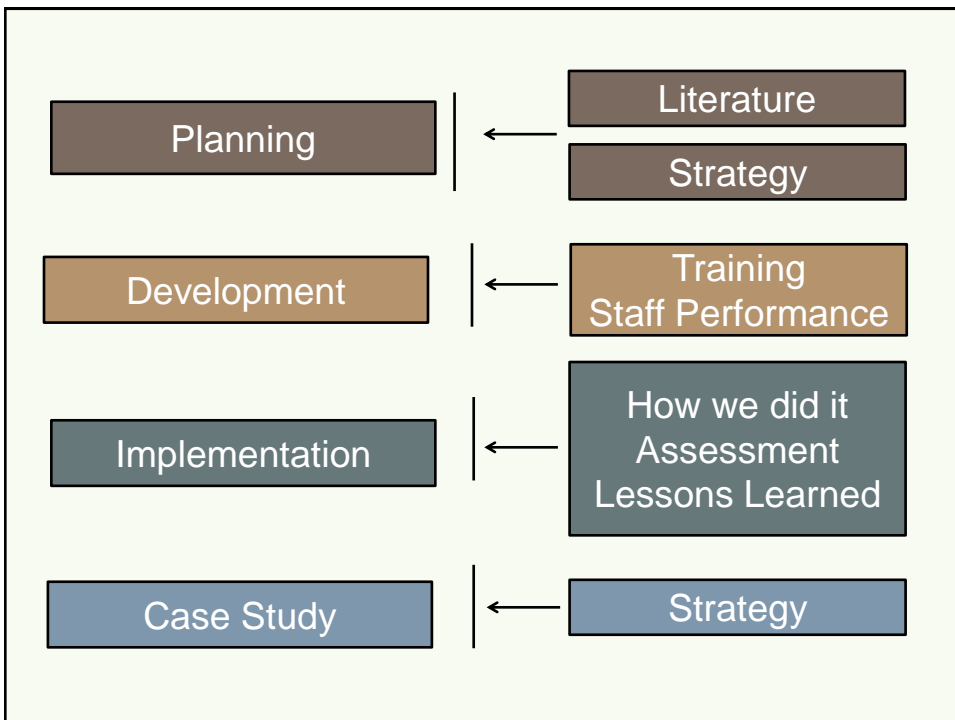
CRICS9 Panel 5 Developing Staff Competencies in Emerging Technologies

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NIH Library | Office of Research Services | National Institutes of Health



Who we are



We looked at

Changes in Technology

Changes in Behavior

Learning Theories

Information Literacy

Digital Literacy

Other Library Programs

Dimensions of [building] capacity



E-Mediate Day 1: A Networked Mindset To Capacity Building (2011), Beth Kanter.

Changes in technology



“Consumers want their information **when** they want it, **how** they want it, and in **whatever quantities** they want it.”

~Price Waterhouse Study~



Changes in user behavior

New normal: 1999

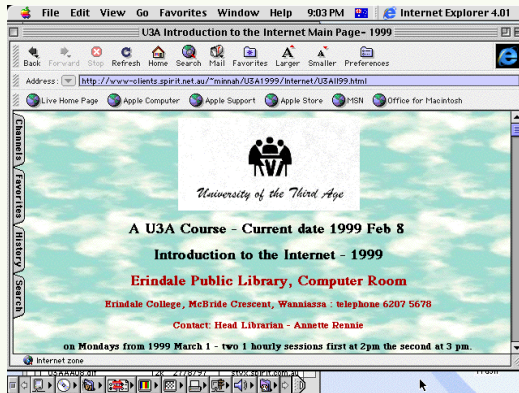


Image: introduction to the Internet, Byron Soulsby.

- Most of “us” were not active users of the Internet.
- Active Users were:
 - Male
 - White
 - College educated
 - Dial-up at 32/kbits
 - Directory and portal search
 - Chat rooms

Adapted from Pew Internet & American Life Project, 2011

New normal: now

- Broadband
- Mobile
- Less SES stratification
- Less generational variance
- Social networking and content creation
- Video on demand



Image Source: Business Insider "Incredible Things That Happen Every 60 Seconds On The Internet"

Adapted from Pew Internet & American Life Project, 2011

The mobile landscape - data

- “The Mobile Difference:” mobile users are more likely to update, to share, to create, to forward, and to record.
- 31% of text message users prefer texting to voice calls, and young adults stand out in their use of text messaging.
- More than a quarter (28%) of all American adults use mobile or social location-based services of some kind.
- Several demographic groups have higher than average levels of smartphone adoption.

Pew Internet 2011 Trend Data: <http://www.pewinternet.org/Trend-Data.aspx>

What does this mean for organizations?

- SNS allow for immediate, spontaneous creation of networks.
- The ability to create new pathways to users and stakeholders.
- Social networks and social media are becoming more important in community building and maintenance.
- Use social media to develop a culture of listening.

Rainie, Lee. (2011). The social media landscape

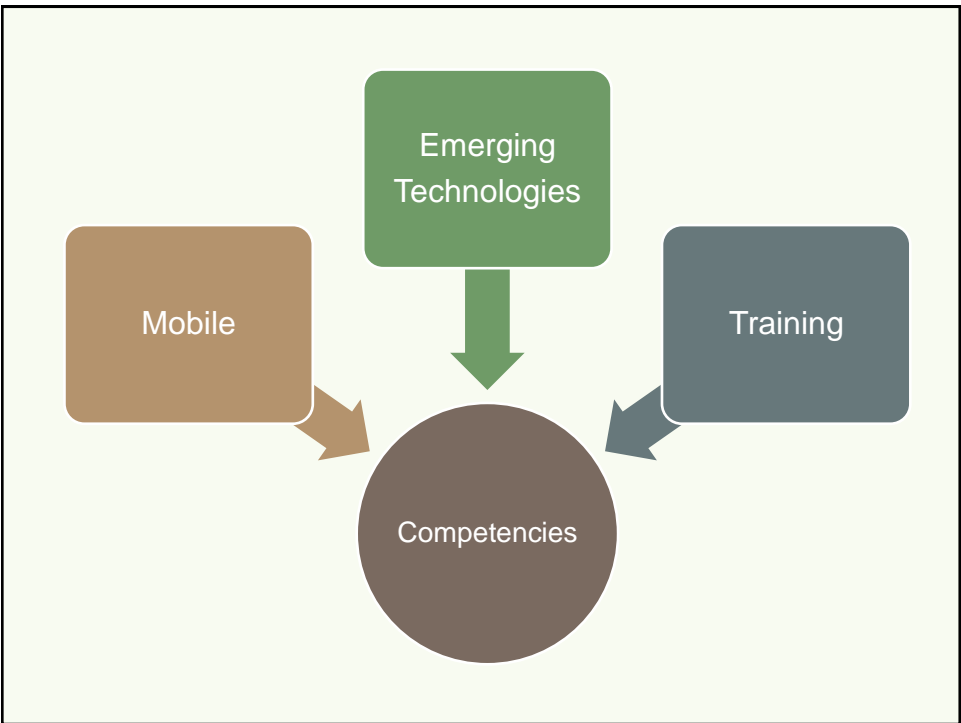
Disruption is our friend

“We are living in a time where technology is connecting us to an increasingly networked world. We see it in our personal lives first. However, it is having a profound effect on the way in which health organizations and non-profits do their work, communicate to stakeholders, and deliver their programs.”

E-Mediate Day 1: A Networked Mindset To Capacity Building (2011), Beth Kanter.



Planning

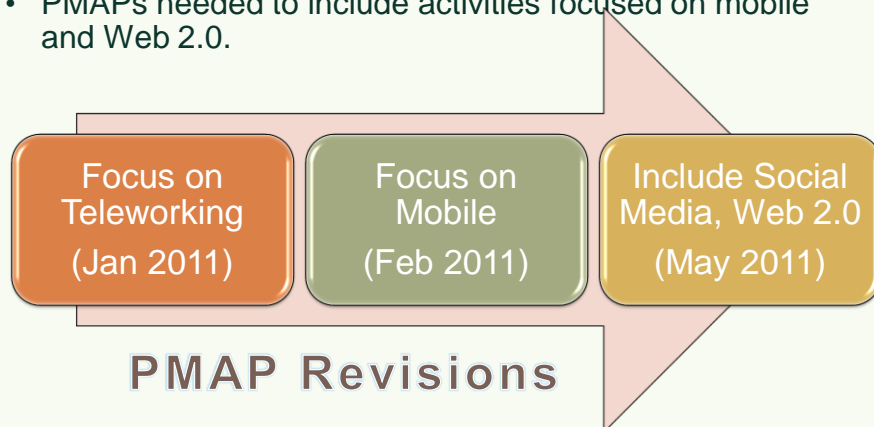


The Emerging Technologies Team (ETT) and its role in training

The team helps to support **mobile computing**, **social media**, and other technologies critical to science and medicine.

Staff performance

- Supervisors reached out to ETT to assist in developing objectives for performance plans (PMAPs).
- PMAPs needed to include activities focused on mobile and Web 2.0.



Planning...targets

- Compile a list of available devices and their platform: Apple, Blackberry, Android.
- Identify and document issues related to authentication on mobile devices (iOS and Android).
- Planning for and supporting multiple devices.
- Partner with other techie folks on campus.
- Sustaining the program.

Planning...mobile

- Deciding who gets what.
- Device negotiation with vendors.
- Contract negotiation with vendors.
- Figuring out what is allowed by HHS & NIH CIOs.
- Deciding how to train staff on using their mobile devices.

Planning...training

- Supporting staff development across platforms.
- What should be our training priorities?
- What training models have been successful and will they work at the NIHL?
 - Brown-bags versus hands-on.
 - Accommodating adult learners.
 - Librarians, Informationists, support staff, and the business office.



Development &
Implementation

Development...mobile

IAB Branch Chief met with ETT to discuss device deployment.

ETT met with all library staff outlining team objectives, mobile deployment, and staff training.

IAB Branch Chief sent out survey asking staff about preferences for a mobile device.

Development...training

Developed curriculum that included a variety of methods for **educating** staff, developed a **staff technology challenge**, and **leading by example**.

Developed methods to **evaluate staff competencies** with their devices.

We really wanted to build a **community of learners** that was focused on **mobile**, **social media**, and **emerging technologies**.

How we did it

- Brown-bags for staff education.
- Meet and Greet sessions with the ETT.
- Mobile “show and tell.”
- Reference Assistant (RA) Tech Challenge.
- Informal Communities of Practice.
- ETT served as “ambassadors” for the technology.

Mobile device deployment

18 BlackBerry Devices

14 Android Devices

12 iPads

44

14 staff never had a mobile device at work
3 did not have a personal cell phone

Staff brown bags

Mobile
Computing
101

Twitter

Dropbox
and File
Sharing

Blogs and
RSS

Cloud
Computing
and Google

Social
Bookmarks

Spatial
Literacy and
Mapping

Crowd-
sourcing

SM & Public
Health

Assessment



Evaluation

- **Surveys** (used Google Forms & SurveyMonkey).
 - App evaluation form.
 - Device evaluation form.
 - Survey on mobile device (perceptions about getting the device).
 - Narrative summary if devices were returned.
- **Narrative Reports** (iPads only).

Evaluation?



- Was harder than it should have been.
- Reluctance of staff to complete evaluation forms & provide feedback (except when something didn't work).
- Difficult to come up with outcome measures – esp. those relevant to our type of library.
- Was not able to work on evaluation plan before distributing devices.



Lessons Learned

Lessons learned [1]

- How do we encourage the discovery of new services and applications.
- Evaluating staff competencies with their devices.
- Time to develop & conduct the trainings.
- Determine how to evaluate? What to evaluate?

Lessons learned: [2]

- Planning and establishing goals at the outset are essential.
- Distribution of work: be prepared for a lot of hand-holding to get people up to speed.
- Jumping through government-specific TOS jargon/policies (iTunes, 3G, repurposing the BlackBerry devices).

Lessons learned: [3]

- Squeezing in time here and there to focus on this entire initiative does not work very well.
- Make what you are doing relevant. You cannot make people excited about something.
- Innovation is hard. Even if you have the support of leadership, implementing something new is not easy.
- We had to become innovative in figuring out ways to encourage staff without explicitly providing instructions.

Case Study: Reference Assistant (RA) Tech Challenge



Timeline*

Feb 2011	————	P1 – First Meeting and developing PMAPs
Mar – Apr 2011	————	P2 – Brainstorming and finalizing PMAPs
May 2011	————	P3 – Literature Review and Planning
Jun 2011	————	P4 – Developing content
Jul 2011	————	P5 – Developing Module Goals, Objectives, and Milestones
Aug 2011	————	M1 – Introduction and Getting to Know Google
Sep 2011	————	M2 – Blogs and Wiki's Module
Oct 2011	————	M3 – Spatial Literacy and Online Mapping
Nov 2011	————	M4 – Online Photo Sharing
Dec 2011	————	M4 – Social Networks and Online Communities
Jan 2012	————	A1 – Assessment and Debriefing with Supervisor

Map Training to Performance Plans



"Every staff person is required, as part of their annual performance review, to do a certain number of learning opportunities and sharing activities. These can be from large to small, and the credit is earned by both doing and sharing."

Sandra Smith, Learning and Development Manager at the Denver Public Library.

23 Things - Commonalities

1. Facilitated learning.
2. Primary web-based resource for information.
3. The "23 Things" timetable announced in advance.
4. Includes reflection & interaction.
5. Each topic has an introductory lead.
6. Combination of face-to-face and online only.
7. Celebration at the end of modules.
8. Voting for favorite activities.
9. Certificate for those completing all 23 Things.

Source (adapted):Yoshikawa & Webber, 2011.

23 Things – Original guidelines*

1. Encourage networking and shared learning.
2. Encourage traditional and face-to-face communication.
3. Encourage group discovery.
4. Accommodate non-techies and different learning styles.
5. Focus on discovery, not skill building.
6. Reward staff for learning.
7. Encourage staff to play.

* That we identified with, and would work for us.

Source (adapted):Yoshikawa & Webber, 2011.

Learning Dimensions



Self-directed



Use of Own Experience



Sharing and Collaboration



Motivation

Adapted from Smith, M. K. (2002,) "Malcolm Knowles, informal adult education,..."

RATECH learning objectives

- As much as possible, the modules should be self-directed.
 - Doug & another NIHL staff person available as backup.
- Use personal experiences as a resource for learning.
 - Blog about their experiences, mapping through their lens, photos and networks from their life.

Adapted from Smith, M. K. (2002,) "Malcolm Knowles, informal adult education,..."

RATECH learning objectives

- Immediately apply what they learn through exercises, sharing, and group discussion.
 - We had a journal club at the end of each section.
 - RAs had the option to lead each journal club.
- Try to motivate by internal rather than external factors.
 - "I feel that I need to be up-to-date to help our patrons."

Adapted from Smith, M. K. (2002,) "Malcolm Knowles, informal adult education,..."

RATECH format

Module
Launch

Assessment
of Learning

Assessment
of Module

Debriefing
Session

RATECH Modules

Blogs & Wikis



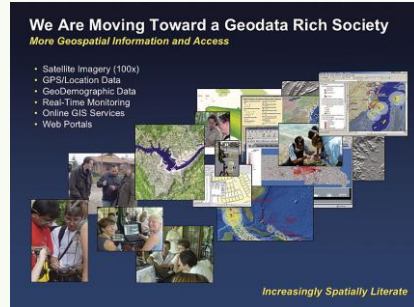
Online images & photo
sharing

RATECH Modules

Spatial literacy and
online mapping



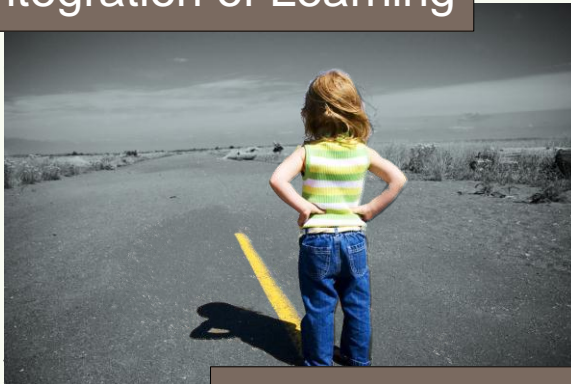
Social Networks



RATECH Evaluation

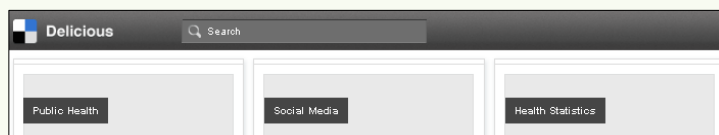
- **Surveys**
 - Module Assessment.
 - Learning Assessment.
- **Monthly Debriefing Sessions.**

2012: Integration of Learning

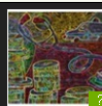


2011: Internal Training

Sharing Content



<http://www.delicious.com/joubertd>

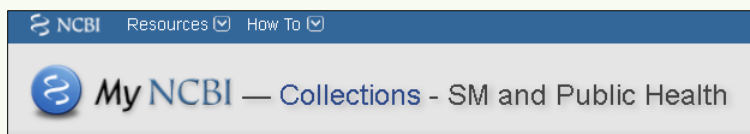


Social Technologies and Public Health

"Social and participatory aspects of the Web and how social technologies are used in health communication and public health."

Curated by Doug Joubert

<http://www.scoop.it/t/social-technologies-and-public-health>



<http://go.usa.gov/v4w>

Social Media University

Provides an overview of social media for the NIH community

Tags: blogs, facebook, google docs, online communities, online privacy, rss, social media, social networking, social networks, twitter, youtube

Last Updated: Aug 16, 2012 | URL: <http://nihlibrary.campusguides.com/nihismu> | [Print Guide](#) | [Email Alerts](#)

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What's New in Social Media


- Does Your Klout Score Determine Your Value?
- 7 Ways to Use Yelp to Improve Your Local Business
- 8 Tips for Using Facebook Scheduled Posts
- How to Grow a Blog and Following With Podcasting
- LinkedIn Content Sharing: This Week in Social Media

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Introduction



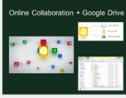
YouTube and Online Video



Twitter, Blogs and RSS Feeds




Social Networks & Online Communities



Online Collaboration + Google Drive

Need Help?



MaShana Davis
Web Content Manager

[in](#) [t](#)

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 Building 10, MSC 1150
 Bethesda, MD 20892
 301.594.6470
[Send Email](#)

Links:
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Online Companion to SMU

Thank-you

Questions?

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