

Web Tools and Technology for Effective Research Part 2

Ubaldo M. Córdova-Figueroa

Department of Chemical Engineering, University of Puerto Rico - Mayagüez <u>http://academic.uprm.edu/ucordova</u>

Research Academy for Faculty & Postdoctoral Fellows March 21, 2013



• What do I want to achieve as a researcher?

- What do I want to achieve as a researcher?
- Do I consider research a hard thing to do? Why?

- What do I want to achieve as a researcher?
- Do I consider research a hard thing to do? Why?
- What should I do to improve my performance in research?

- What do I want to achieve as a researcher?
- Do I consider research a hard thing to do? Why?
- What should I do to improve my performance in research?
- What basic tools are required to improve my performance?

- What do I want to achieve as a researcher?
- Do I consider research a hard thing to do? Why?
- What should I do to improve my performance in research?
- What basic tools are required to improve my performance?
- What is the best way to conduct research? And when is the best time?

- What do I want to achieve as a researcher?
- Do I consider research a hard thing to do? Why?
- What should I do to improve my performance in research?
- What basic tools are required to improve my performance?
- What is the best way to conduct research? And when is the best time?
- Is time important to me? How could I do more things in less time?

• Stay organized

- Stay organized
- Learn better and faster

- Stay organized
- Learn better and faster
- Find "things" easier and quicker

- Stay organized
- Learn better and faster
- Find "things" easier and quicker
- Work and collaborate

- Stay organized
- Learn better and faster
- Find "things" easier and quicker
- Work and collaborate
- Share your research:

- Stay organized
- Learn better and faster
- Find "things" easier and quicker
- Work and collaborate
- Share your research:
 - Papers, journals, books

- Stay organized
- Learn better and faster
- Find "things" easier and quicker
- Work and collaborate
- Share your research:
 - Papers, journals, books
 - Conferences, technical meetings

- Stay organized
- Learn better and faster
- Find "things" easier and quicker
- Work and collaborate
- Share your research:
 - Papers, journals, books
 - Conferences, technical meetings
 - Academic website, blog, social networks

- Stay organized
- Learn better and faster
- Find "things" easier and quicker
- Work and collaborate
- Share your research:
 - Papers, journals, books
 - Conferences, technical meetings
 - Academic website, blog, social networks
 - Research group website: <u>academic.uprm.edu/ucordova</u>

- Stay organized
- Learn better and faster
- Find "things" easier and quicker
- Work and collaborate
- Share your research:
 - Papers, journals, books
 - Conferences, technical meetings
 - Academic website, blog, social networks
 - Research group website: <u>academic.uprm.edu/ucordova</u>

Productivity













Google Apps for Education

- Cloud-based applications:
 - Gmail tags, filters
 - Contacts versatile, configurable contact lists
 - Calendar shareable, publishable calendars
 - Documents/Drive allows collaboration in shared docs
 - Talk/Hangout allows chat & videoconferencing
 - Reader feeds, RSS
- Integrates services:
 - Create group with Contacts
 - Share document with group: e-mail or chat with collaborators
 - Share calendar event with group: e-mail or attach documents with invitees.
- Research: Group meetings, write proposals or papers

Google Drive

- Offers complete suite of document types:
 - Word processor compatible with MS Word
 - Spreadsheet compatible with Excel
 - Forms Create online polls, forms, etc
 - Presentation
 - Drawing
 - Collections individual and shareable folders
- Great for collaboration:
 - Everyone works on a single document
 - Everyone sees the latest revision
 - There's access to a full revision history
 - Supports chatting and comments
 - Owner can accept or reject changes

Google Drive:Activity

- 1. Login to Google Apps (go to <u>http://correo.upr.edu</u>)
 - a. From Gmail, click on "Drive"
- 2. Create a new document or upload a document from your computer
- 3. Share the document with <u>ubaldom.cordova@upr.edu</u>
- 4. Publish the document to the Web

Google Reader

- Read all your favorite sites in one place
- Checks your favorite news sites and blogs for new content
- Easily share interesting items with your colleagues
- Is free and works in most modern browsers
- Subscribe to journals, funding agencies, magazines, blogs, job opportunities, organizations and associations, industrial partners, suppliers
- Clients: Reeder (Mac), Modern Reader (PC)

Bad News!! - Google will shut down Reader this summer. Other companies are developing alternatives. Stay tuned!

Dropbox

- Web-based file hosting service that uses cloud storage to store and share files and folders with others across the internet using file synchronization.
- Other alternatives: Google Drive, SugarSync, Amazon Cloud Drive, Windows Live Mesh, Box.net, SpiderOak
- Research: sharing publications, storage of laboratory notes

Evernote

- Robust note taking app
- App for saving ideas, things you like, things you hear, and things you see.
- Sync with all your computer and portable devices
- Research: group meetings, research notebooks, organize research ideas

Evernote: Activity

- I. Go to <u>http://www.evernote.com</u>
- 2. Create account or Download
- 3. Open Evernote
- 4. Click on New Note

Wunderlist

- <u>Simple</u> task management alternative
- Can be used everywhere (all OS and browsers)
- Share tasks with others (invite friends and colleagues to join)
- Alternatives: Orchestra, Reminders

Wunderlist: Activity

- I. Download app: <u>http://www.wunderlist.com/</u>
- 2. Create new list
- 3. Include task
- 4. Invite person next to you

- URL: <u>http://www.diigo.com/</u>
- Social bookmarking (bookmark or tag websites)
- Allows users to highlight any part of website and attach sticky notes - and share that version with others.
- Integrates to browser: best with Firefox.
- Research:
 - Create groups: share links, comment, tag
 - Groups are public or private
 - Collaborative literature review of online content

- Trac is a minimalistic approach to web-based management of projects
- Allows Wikis
- Organizes tasks by milestones, priority
- See progress in centralized timeline
- Multiple users, hosted at personal server
- Active online community, open source, plenty of widgets
- Research: keep track student progress, research notebooks
- Alternatives: Redmine
- Example: <u>https://136.145.62.72:80/trac</u> (restricted)

Twitter

- Microblogging service 140 characters per posting
- "Following" an account = subscribing
- Supplements research: Journals, Funding Agencies, Research Groups, Researchers, Scholars, etc. have accounts on Twitter.
- Information is organized:
 - Hashtags: (#topic) identifies topics of interest.
 - Lists: you can subscribe to a topic.
- Is a means for dissemination of your ideas.
- Allows you to develop professional network.

Twitter:Activity

- I. Go to Twitter: <u>http://twitter.com</u>
- 2. Create an account or login.
- 3. Write your first Tweet, using #researchtools hashtag.
- 4. Click on the #researchtools hashtag.
- 5. Follow some of the people posting there.
- 6. Search for:
 - a. A topic you do research in.
 - b. The same topic using a keyword as hashtag #
- 7. Retweet a posting you want to share.
- 8. Favorite a posting you want to read later.

Zotero

- Free, open source reference management software to manage bibliographic data and related research materials
- Web browser integration, online syncing, integrated to word processors (Word, LibreOffice, etc.)
- Available at <u>http://www.zotero.org/</u>
- Alternatives:
 - Papers: <u>http://www.mekentosj.com/papers/</u>
 - Mendeley: <u>http://www.mendeley.com</u>
 - Others: <u>see comparison chart</u>

Other useful tools

- IFTTT is a service that lets you create powerful connections with one simple statement: If this then that <u>https://ifttt.com</u>
- Doodle: Easy scheduling <u>http://doodle.com</u>
- SortMyBox <u>http://www.sortmybox.com</u>
- DROPitTOme <u>http://dropitto.me</u>
- Pocket <u>http://getpocket.com</u>
- KeepVid <u>http://www.keepvid.com</u>
- A great place for productivity tips: <u>http://lifehacker.com</u>