


# Mapping and Modeling scholarly activity with free tools

(Google maps, and Zotero / Mendeley)



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# What does faculty international engagement look like in a department?



- ✦ Annual report on faculty engagement
- ✦ UMN Priority: “Champion our University – Impact and Reputation” to “Strengthen international academic partnerships”
- ✦ Organizational Leadership, Policy and Development interested in:
  - ✦ Internationalization (international students/ visitors, curriculum represents international ideas, intercultural and cross-cultural engagement)
  - ✦ Internationalization at home (some would include Equity and Diversity, others would not) ... bringing the world back home.

# Problem / Challenge



## Demonstrate research and academic engagement activity

- ✦ Internal to the department – a tool that enables faculty to easily see what others are doing.
- ✦ Shifting department culture: Department merger in 2007/8 and closure with new faculty coming in now (2015/6)
- ✦ Map for visual (offers **serendipity** to see what others are doing and potential collaboration)
- ✦ Entice faculty to update their work (and further use existing tools?)
- ✦ External to the department: Demonstrate international (and national) faculty engagement

## Existing tools

- ✦ Department website  
[www.cehd.umn.edu/olpd/](http://www.cehd.umn.edu/olpd/)
- ✦ UMN Experts Database  
(<http://experts.umn.edu>)
- ✦ UMN conservancy of open access articles, documents, dissertations, data sets  
<http://conservancy.umn.edu/u/>
- ✦ Open text book library  
<http://open.umn.edu/opentextbooks/>

# Getting data



- ✦ Dissertations and Thesis – Digital dissertation exports (with varying spellings of the department name and name changes)
  - ✦ Assumption: Student work reflects the department outputs and what faculty supported (even if students have since left)
- ✦ Faculty survey about international activity and pulling data from their webpages when needed
  - ✦ Faculty can indicate what of their activity they want public
  - ✦ Challenge: Faculty who are particularly active are over-represented or sometimes report less than those who are less active, i.e. conferences
- ✦ Annual review system (“Works,” <http://academic.umn.edu/provost/works/>) \* But I can’t access to this data, but faculty can pull from it to help send in for their report.
  - ✦ Requests scope of faculty activity (international, national, state, and for State information requested by county)

# Interactive mapping options considered

- ✦ CEHD International Reach and Outreach  
<http://www.cehd.umn.edu/international/map/>
  - ✦ Updated with an excel spreadsheet (including images)
  - ✦ Required developers to create
  - ✦ Not searchable
- ✦ CIDE – Comparative and International Development Education - Around the World Map <http://maps.umn.edu/CIDE/>
  - ✦ Updated through a UMN portal – ARC GIS, <https://uspatial.umn.edu/arcgisonline>
  - ✦ Created by students, no one to update at this point
  - ✦ Not searchable
- ✦ Wanted searchable with sufficient text to capture possible search terms

# Map Display – Google maps

(Not analyzed, now searchable!)

My map of (international) engagement across a department

[https://www.google.com/maps/d/edit?mid=zZpH0Wi77KWw.kOuwBs\\_yb0lc&usp=sharing](https://www.google.com/maps/d/edit?mid=zZpH0Wi77KWw.kOuwBs_yb0lc&usp=sharing)

- ✦ Google maps changes... Now searchable?! (It wasn't a year ago and could have been for developing time and \$15,000 or so)
  - ✦ Searchable - upload a spreadsheet or importing data into Zotero / Mendeley
- ✦ Online updates easiest but not very easy to update with spreadsheets
- ✦ Location markers stack on top of each other for the same location (I wanted discrete markers, so I manually spread them out)
  - ✦ Idea – add a few units to latitude or longitude measurement in the spreadsheet before import
- ✦ “Share” creates an instance based on the map as it was when created
- ✦ Faculty / students are more likely to explore / play with it than a database

# Other map ideas...



- ✦ Excel Power Tools mapping capability looks good for analyzed data (not necessarily displaying full records of discrete points???)
- ✦ Headache(s) / Opportunities (depending on how you look at it):
  - ✦ Updates – who is going to do them and how?
    - ✦ Create “alerts” on digital dissertations and google scholar or other academic publishing platforms



# Zotero / Mendeley



- ✦ Bibliographic managers with social platforms (groups) online (like EndNote or RefWorks – but better!)
  - ✦ Zotero ([www.zotero.org](http://www.zotero.org)) Firefox add-in or stand alone
    - ✦ Group examples:
      - ✦ [www.zotero.org/groups/olpd/items](http://www.zotero.org/groups/olpd/items)
      - ✦ [www.zotero.org/groups/olpd-dissertations\\_thesis](http://www.zotero.org/groups/olpd-dissertations_thesis)
  - ✦ Mendeley ([www.mendeley.com](http://www.mendeley.com)) Online or app “PDF organizer”
    - ✦ [www.mendeley.com/groups/7845801/olpd-dissertations-thesis/papers/](http://www.mendeley.com/groups/7845801/olpd-dissertations-thesis/papers/)
- ✦ What is a bibliographic manager?
  - ✦ Keeps citations in a database for integration / use with word processors – word, office libre.
  - ✦ An excellent organizing tool for references



# Modeling ideas

(not yet done)

## Feasible

- ✦ Topical analysis
- ✦ Concentration of activity by geographic region
- ✦ View international research concentrations as future potential for concentrated partners (Nov 9, 2015 UMN campus conversation on International Research) [http://university-relations.umn.edu/assets/pdf/Nov%209%202015%20Campus%20Conversation\\_NEUTRA%20v8.pdf](http://university-relations.umn.edu/assets/pdf/Nov%209%202015%20Campus%20Conversation_NEUTRA%20v8.pdf)
- ✦ Bibliographic managers
  - ✦ Assess which journals have the most publications by faculty
  - ✦ Use for updates (look for date added), faculty can get an account and add their own sources
  - ✦ Frequency of hits / sharing on Mendeley / Zotero groups

## Possibly concerning - Don't want a horse race

- ✦ Proportion of faculty who engage in particular activities
  - ✦ Research / Evaluation
  - ✦ Presentations
  - ✦ Editor roles
  - ✦ Boards
- ✦ Want inviting collaboration – “me too” or “add me to the map”

# Other free tools



## Statistics

- ✦ Statistics Open for All (SOFA)  
<http://www.sofastatistics.com>

## Photoshop alternative

- ✦ GIMP <http://www.gimp.org>