

CollaborOmeter Design

History – Train of Thought - Ideas

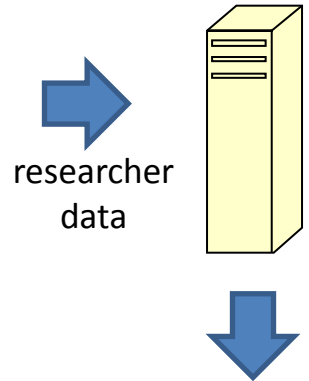


Use Case: Keyword Mapping

Process Analysis	Collaborative Computing	Health Insurance
User-centered Design	Gamification	Post-secondary Education
Data Modeling	Model-driven Development	Payroll, Tax, & HR Services
Object Modeling	Requirements Engineering	Social Service
Requirement Engineering	Research Areas	Business Services
Project Management	Grounded Theory	Sales and Manufacturing
Database Management	Research Methods	Medical Lab
		Inventory Storage & Retrieval
Skills		Domains

Gamification	Technology Adoption
Software Design	EMotion
Collaborative Computing	Crowdsourcing
Human-computer Interaction	Publication Keywords

Spotlight: TEDx, Railway to Prosocial Crowdsourcing
Current Grants: Motivating Collaborative Interactions
Fun Facts: Stand-up Paddle Yoga, Grandmother

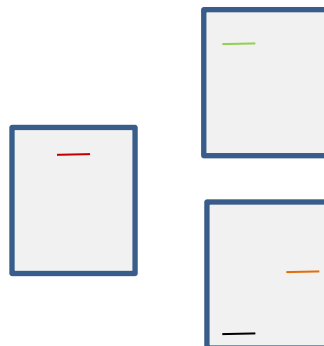


GEARS ★★★★★

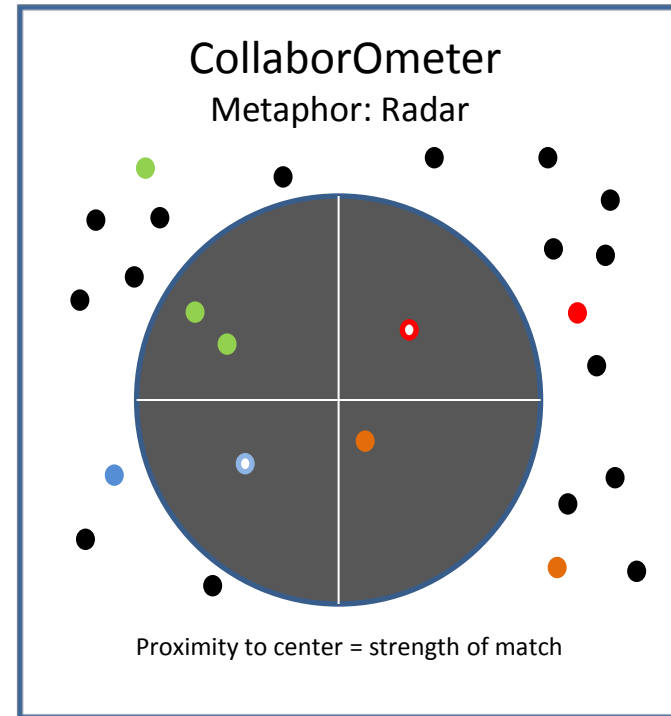
Dr. Deborah Gears, Associate Professor
 PhD, Information Systems (2011),
 "Wiki Behavior in the Workplace: Emotional Aspects of Content Development"
 GCCIS, IST Faculty Since 2000

Deborah.Gears@rit.edu

ED-1-2014 Card-081X1



HUD



TIE STRENGTH

- Colored Solid Circle** = Tie strength of acquired card
- Open Circle** = Tie strength, card Not acquired
- Black Circle** = Tie strength=0, identity unknown (no card)

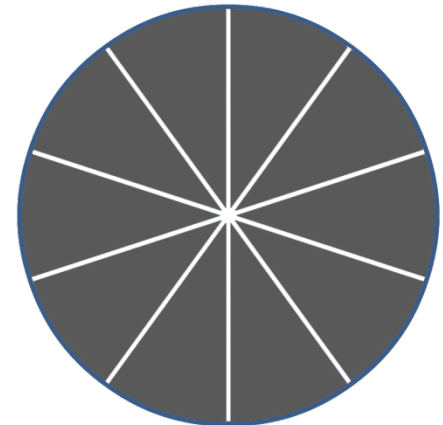
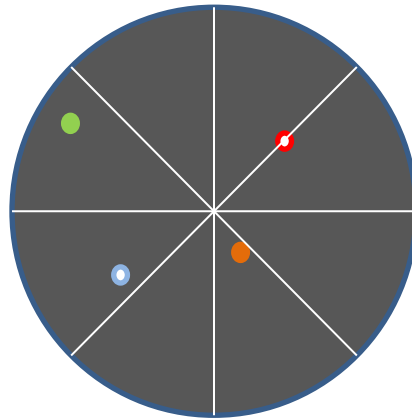
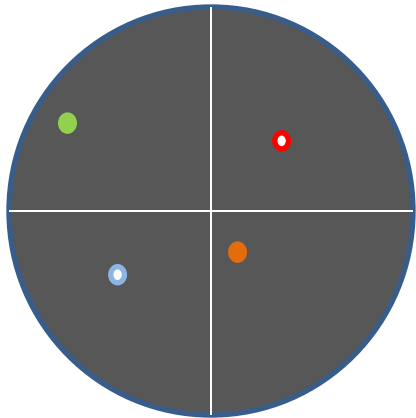


Meaningful Choice:

1. Search for a researcher
2. Request an interaction

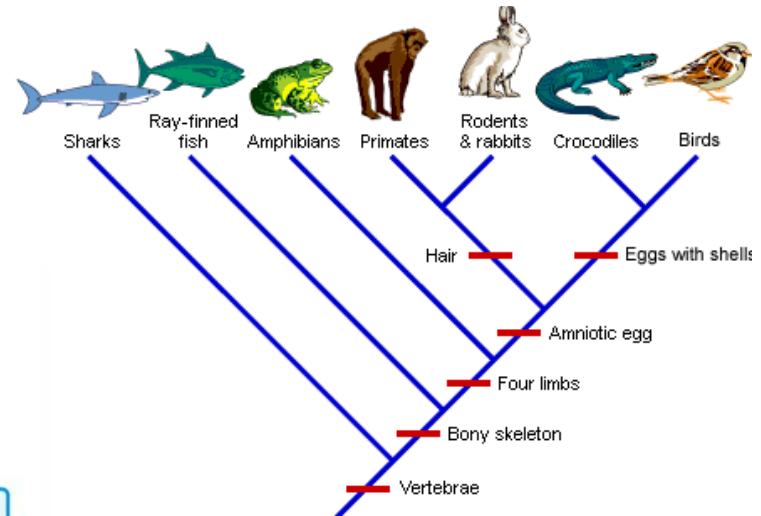
Past Ideas

- Circle or square split into 8 parts. One for each College
 - Not do-able. There are 9 colleges and some researchers don't fit into those 9
 - Administration or OTHER could be a 10th

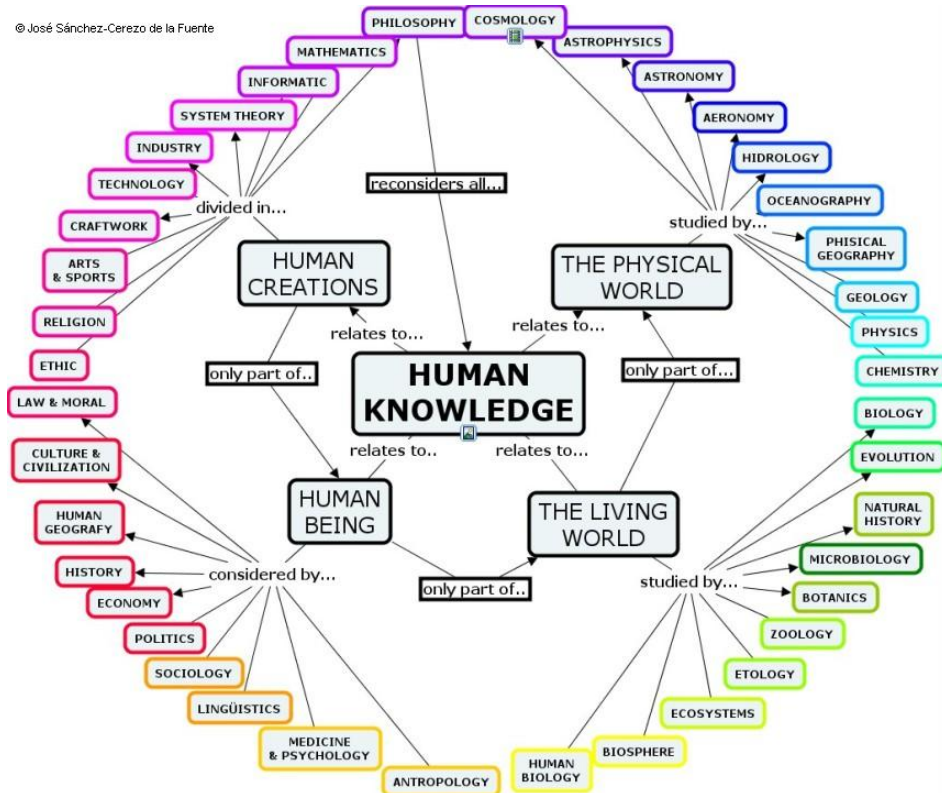


Data Visualization

- Phylogenetics Cladogram
- Knowledge Map

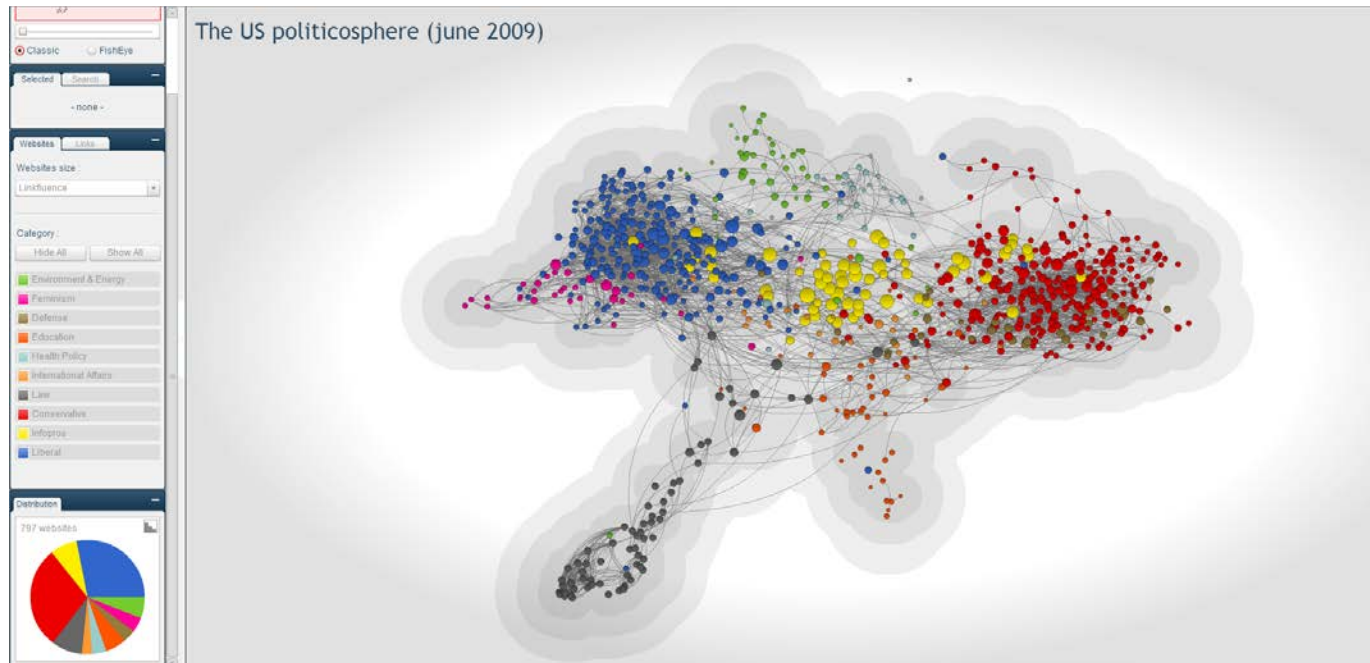


© José Sánchez-Cerezo de la Fuente



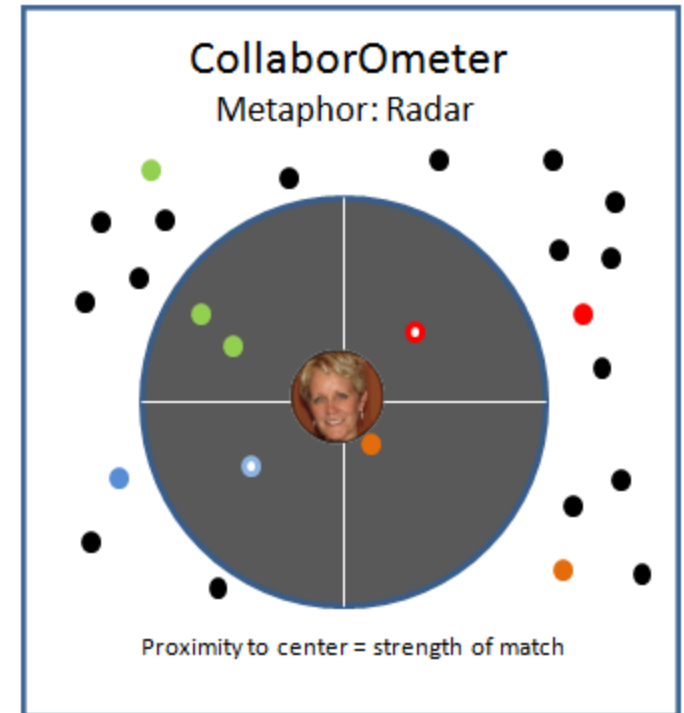
Data Visualization

- <http://policosphere.net/map/>

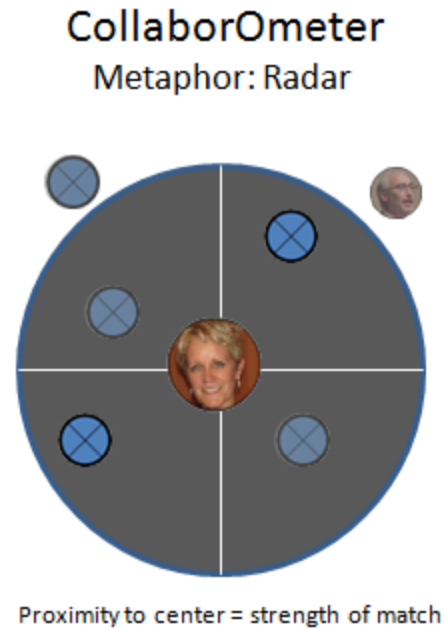
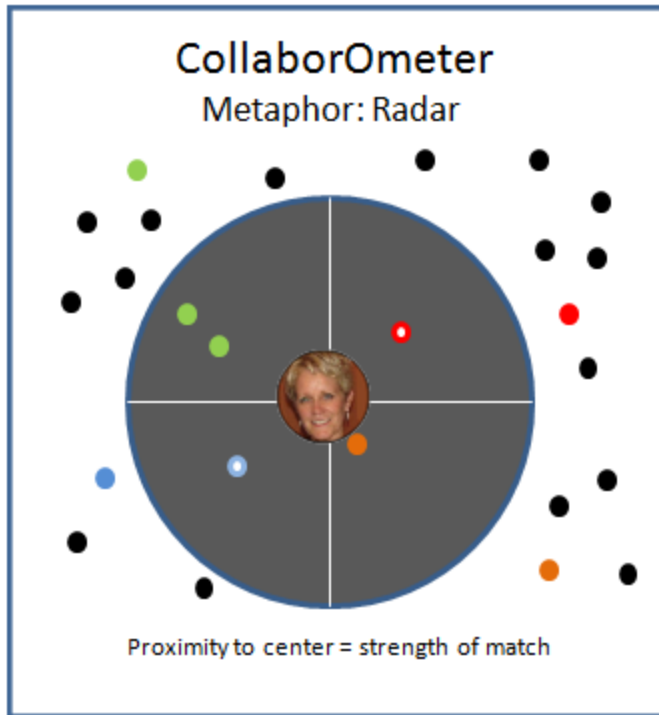


CollaborOmeter Design

- Linking blogs can be like linking people
 - The more skills, domains, research areas, etc. that are shared the closer you are.
- Lets start with connecting everyone to one person



Measuring All:1



Changing Calibration

Calibration: Deb Gears

CollaborOmeter
Metaphor: Radar

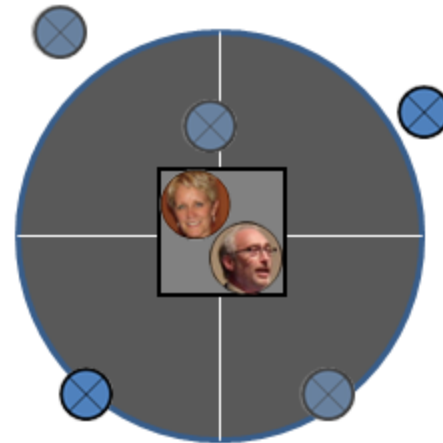


Proximity to center = strength of match

Here

Calibration: Deb Gears
& Marc Marschark

CollaborOmeter
Metaphor: Radar

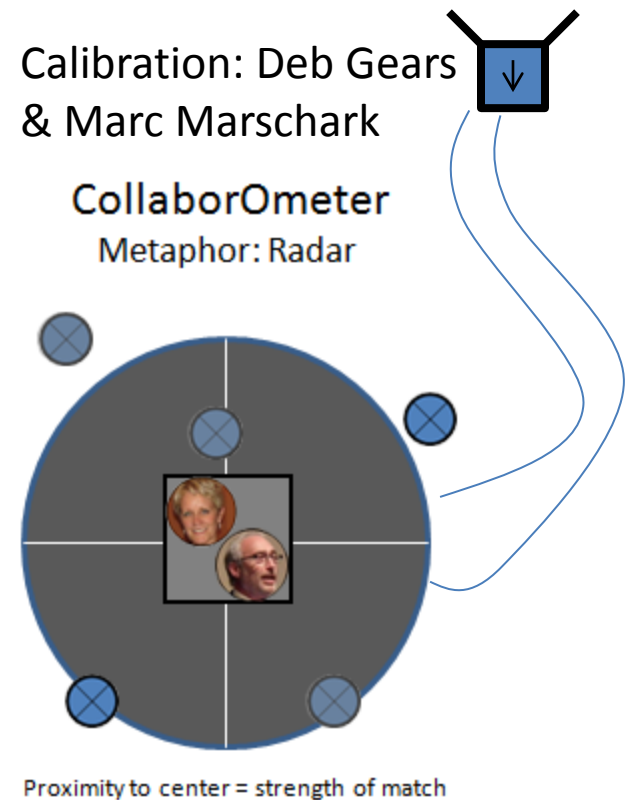
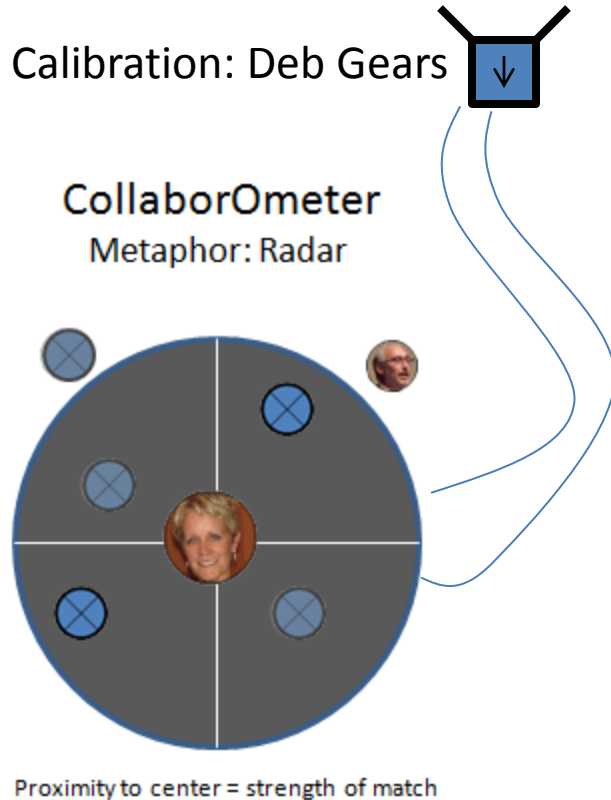


Proximity to center = strength of match

Here?

How do we get from
to

Changing Calibration



In this example we have now acquired Marc's card. What if we drag him into the box/tube that leads into the CollaborOmeter? By dragging things into the Calibration box/tube we can modify the calibration of the CollaborOmeter

Understanding Calibration

Calibration: Deb Gears CollaborOmeter

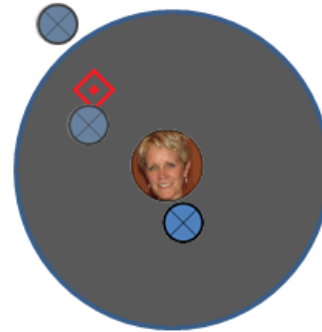
- ◆ Skills
- ⚙ Research Areas
- ❄ Research Methods
- 🎯 Domains



Calibration: Deb Gears
& Skills

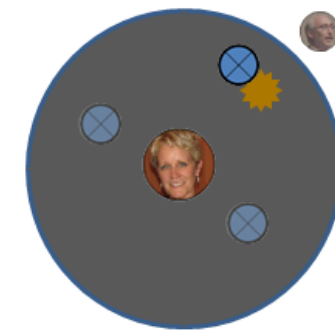
CollaborOmeter

- ◆ Skills
- ⚙ Research Areas
- ❄ Research Methods
- 🎯 Domains



CollaborOmeter

- ◆ Skills
- ⚙ Research Areas
- ❄ Research Methods
- 🎯 Domains



Calibration: Deb Gears
& Research Areas

CollaborOmeter

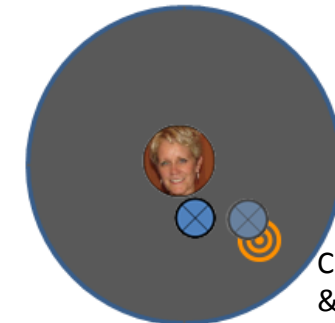
- ◆ Skills
- ⚙ Research Areas
- ❄ Research Methods
- 🎯 Domains



Calibration: Deb Gears
& Research Methods

CollaborOmeter

- ◆ Skills
- ⚙ Research Areas
- ❄ Research Methods
- 🎯 Domains



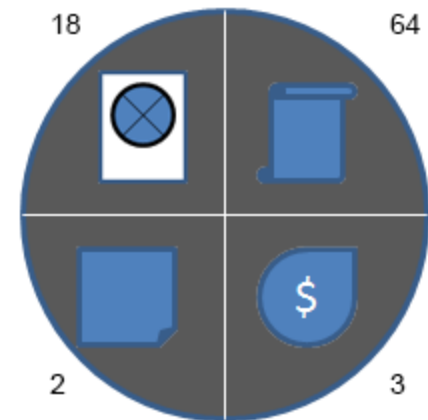
Calibration: Deb Gears
& Domains

ColaborOmeter as THE Search Engine

A screenshot of the ColaborOmeter search interface. At the top, a user profile for 'George' is shown with a yellow triangle icon. A search bar contains the text 'Manufacturing'. To the right of the search bar are icons for a plus sign, a grid, a profile picture, and a gear. Below the search bar, the text '87 Results for "Manufacturing"' is displayed. Underneath, there are four categories of results: 'People (18)' with a grid of 18 icons (one real photo, 17 placeholder icons), 'Publications (64)' with a book icon, 'Projects (2)' with a document icon, and 'Grants (3)' with a dollar sign icon.

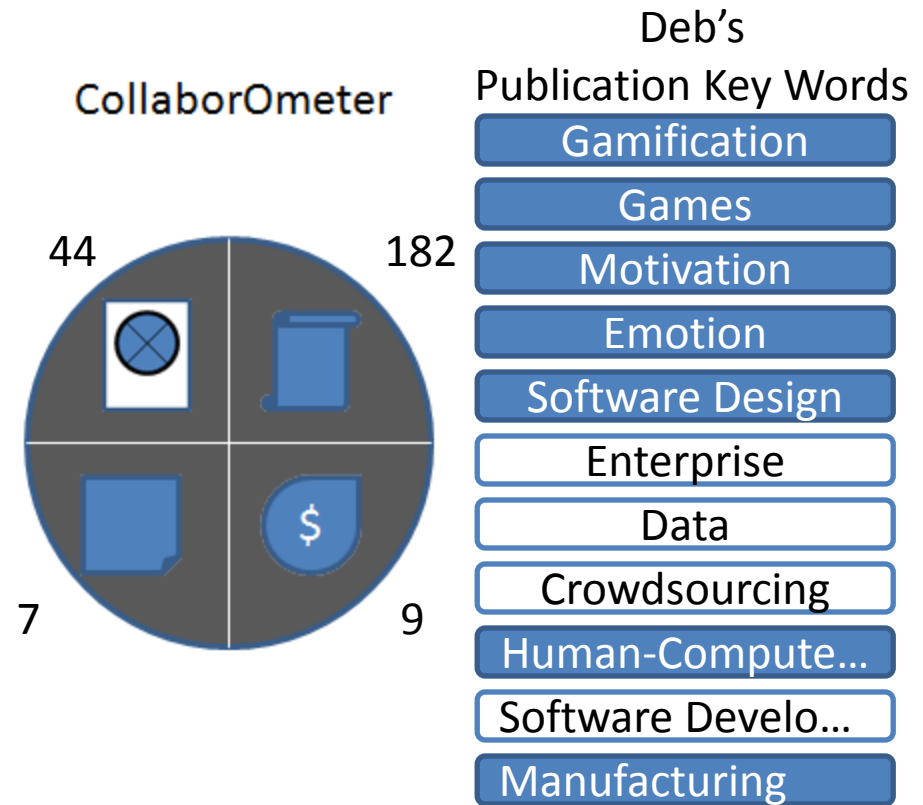
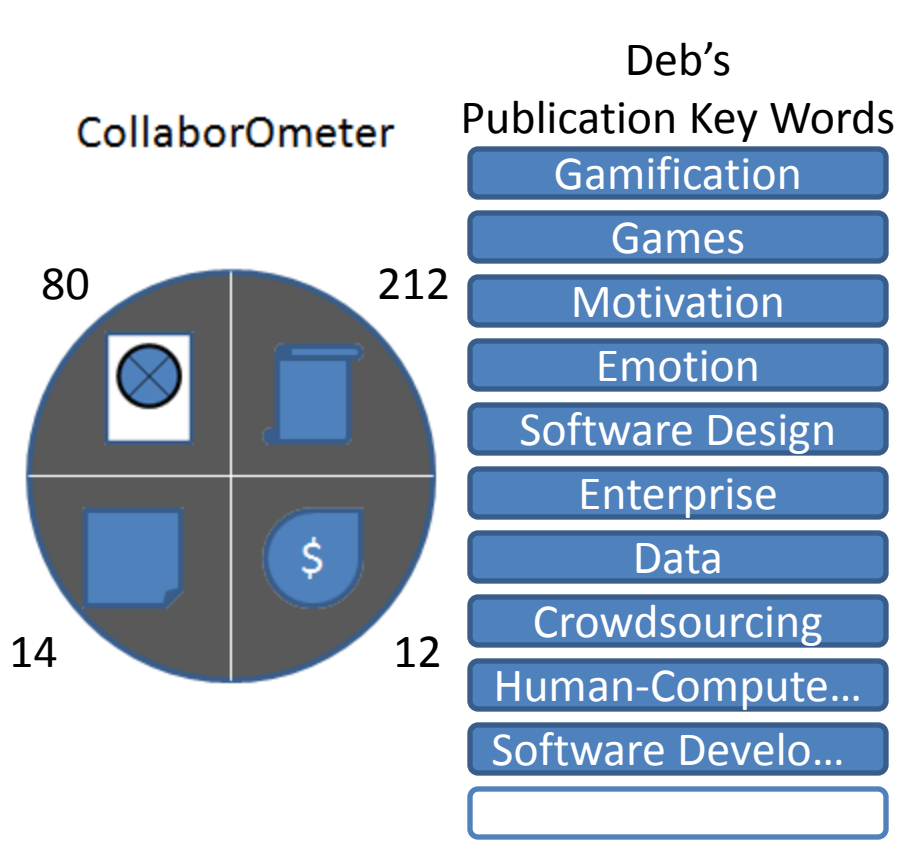
OR

CollaborOmeter
Searching for Manufacturing



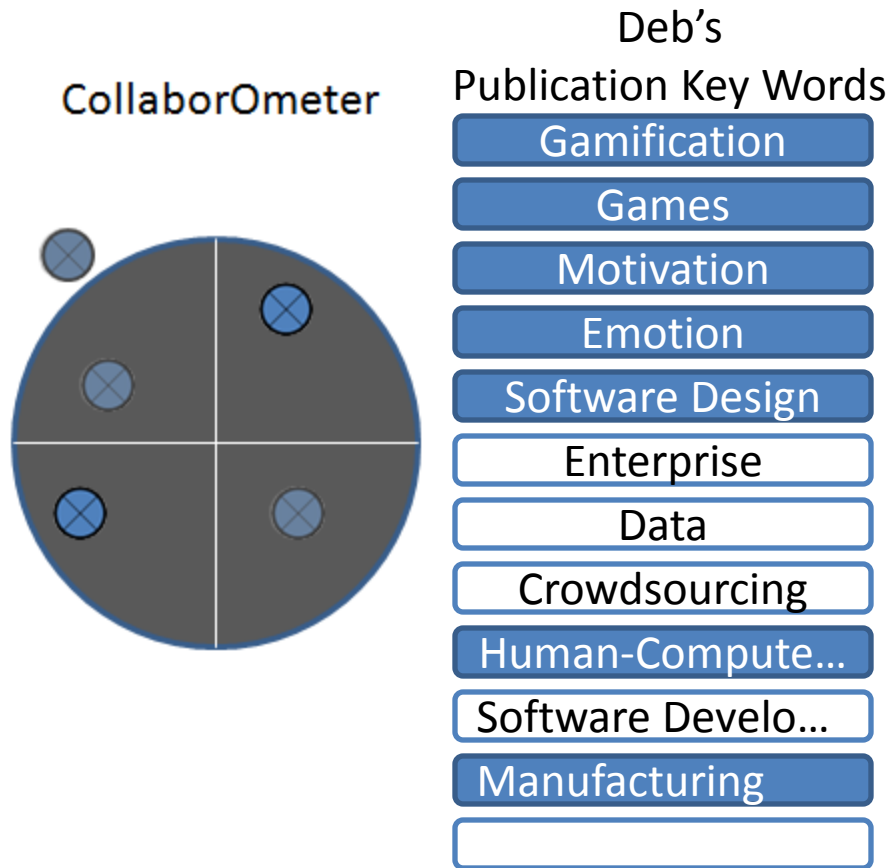
Publication Key Words

Click on a Key Word to enable or disable it



Publication Key Words

Now the CollaborOmeter is finely calibrated



This is fine for mock-ups.
But how are those circles being placed?
Closer to the center is more matches, but what
does each direction mean?

Maybe the CollaborOmeter isn't the best way
to visualize data that has many different
attributes involved.

Let's try a list view.

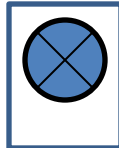
Publication Key Words – List View

Small Result Count might look like this:

Deb's

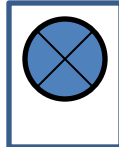
Publication Key Words

Gamification



6/7 – Gamification, Games, Software Design, Human-Computer Interaction, Manufacturing ...

Games

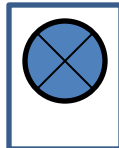


4/7 – Gamification, Games, Software Design, Human-Computer Interaction

Motivation

Emotion

Software Design

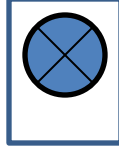


4/7 – Gamification, Games, Software Design, Human-Computer Interaction

Enterprise

Data

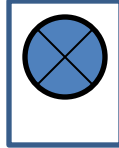
Crowdsourcing



3/7 – Games, Software Design, Human-Computer Interaction, Manufacturing

Human-Compute...

Software Develo...



2/7 – Games, Software Design

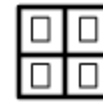
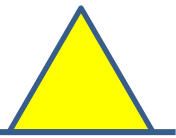
Manufacturing

 12 More Results

Publication Key Words – List View


Large Result Count might look like this:


Deb's		
Publication Key Words		
<input checked="" type="checkbox"/> Gamification	<input checked="" type="checkbox"/>	7/7
<input checked="" type="checkbox"/> Games	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> Motivation	<input checked="" type="checkbox"/>	7/7
<input checked="" type="checkbox"/> Emotion	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/> Software Design	<input checked="" type="checkbox"/>	7/7
<input type="checkbox"/> Enterprise	<input checked="" type="checkbox"/>	7/7
<input type="checkbox"/> Data	<input checked="" type="checkbox"/>	
<input type="checkbox"/> Crowdsourcing	<input checked="" type="checkbox"/>	6/7 – 6 Results
<input checked="" type="checkbox"/> Human-Compute...	<input checked="" type="checkbox"/>	
<input type="checkbox"/> Software Develo...	<input checked="" type="checkbox"/>	5/7 – 14 Results
<input checked="" type="checkbox"/> Manufacturing	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	67 More Results

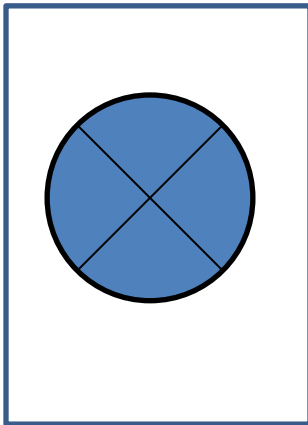
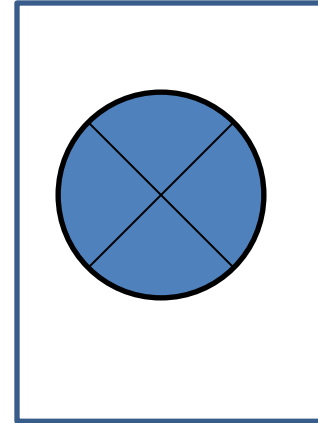
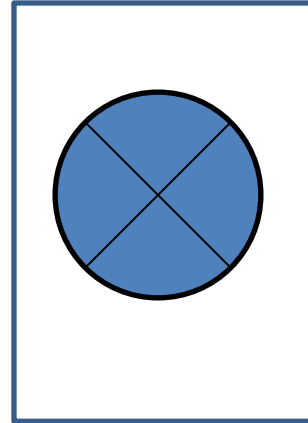


Want more Cards?

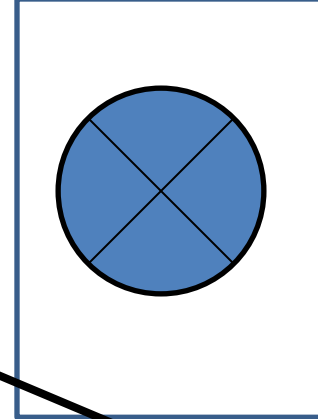
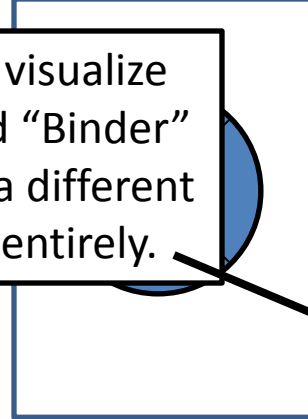
Search

GCCIS FACULTY SINCE 2000
GEARS ★★★★★
INFORMATION SCIENCES AND TECHNOLOGIES

Deborah Gears, PhD
ASSOCIATE PROFESSOR
RIT
Deborah.Gears@rit.edu

NTID FACULTY SINCE 1993
MARSCHARK ★★★★★
NATIONAL TECHNICAL INSTITUTE FOR THE DEAF
Honorary Professor, University of Aberdeen

Marc Marschark, PhD
PROFESSOR
Director, Center for Education Research Partnerships, NTID
RIT
Marc.Marschark@rit.edu



How else can we visualize data? This card "Binder" can take us to a different visualization entirely.



CAST

GCCIS

Health Sciences

COLA

COS

Saunders

KGCOE

CIAS

NTID

Other



4/7/14

O = Researcher
X = Link
~ = Root

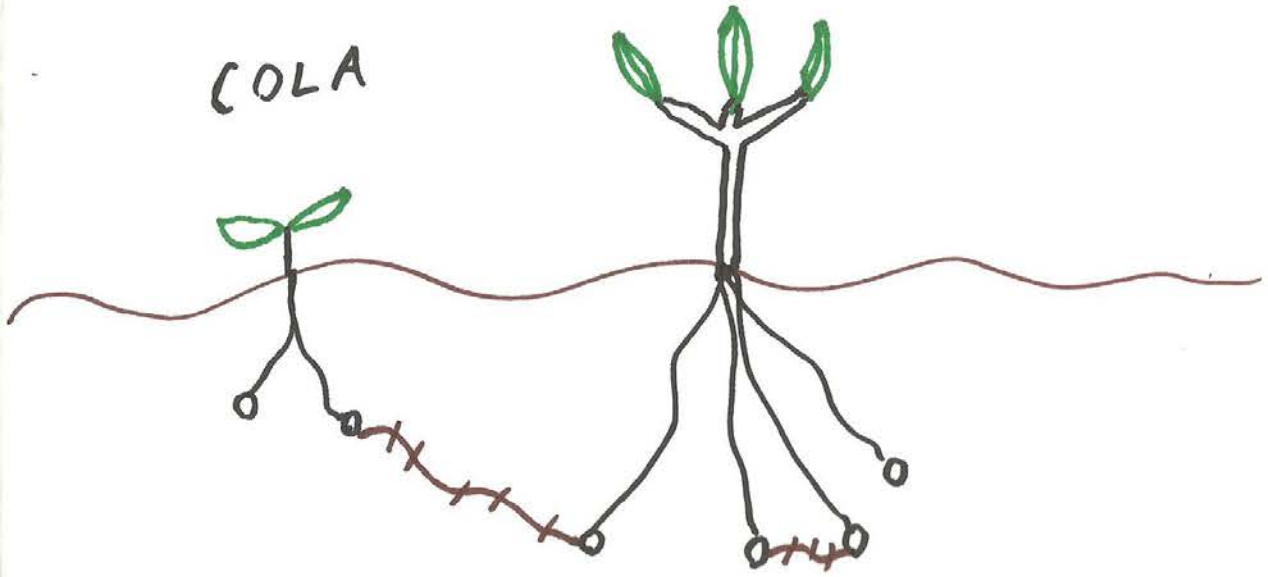
↑ Roots = ↑ Tree

↑ connections = ↑ Tree

↑ connections between colleges = ∪ Both trees

COLA

GCCIS



6/5/14

CAST

SANDERS

HEALTH SCIENCES

GCCIS

COLA

COS

KGCOE

CIAS

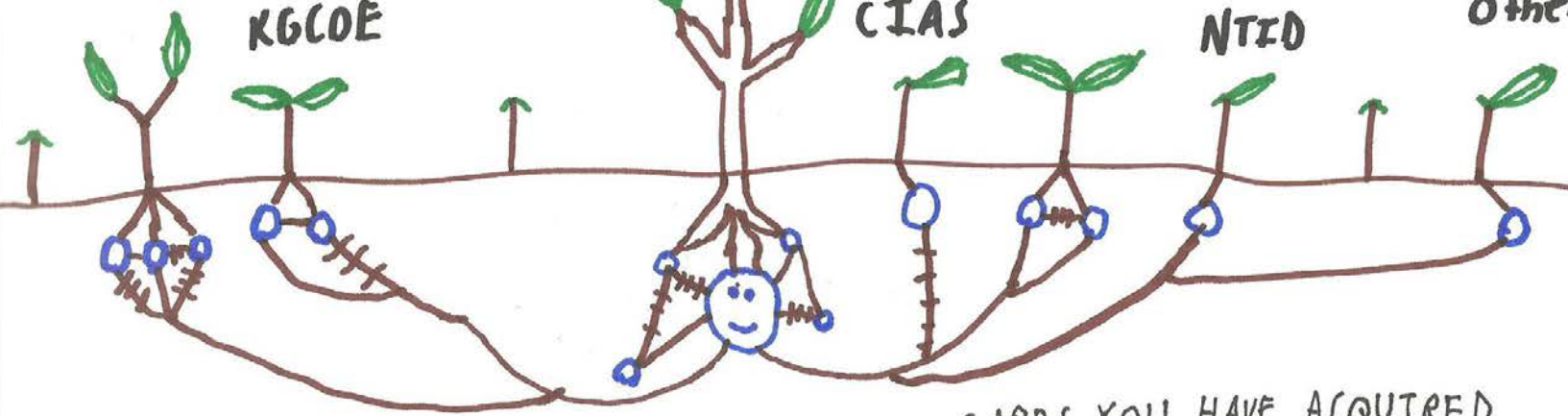
NTID

Other

○ RESEARCHER

~ ROOT

✕ LINK



CARDS YOU HAVE ACQUIRED

GEORGE

@

RIT

