

Interdisciplinary Collaboration

Class 16

Agenda

- 3:00-3:03 Announcements
- 3:03-3:13 Quiz
- 3:13-3:35 Interdisciplinary Research
- 3:35-3:50 Final Project Topics Discussions

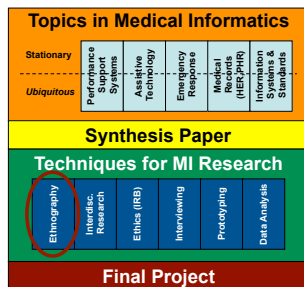
Announcements

- MI: in subject line
- Topic report sign-up on Google Groups
- Synthesis Paper Presentation sign-up
- Friday Evaluation

Quiz

1. Discuss three challenges that can happen during interdisciplinary collaborations.
2. What discipline-specific expert do you need to meet with for your final project? What are some of the things you will do to make the meeting with your expert easier?

Where are we?



What is interdisciplinary research?

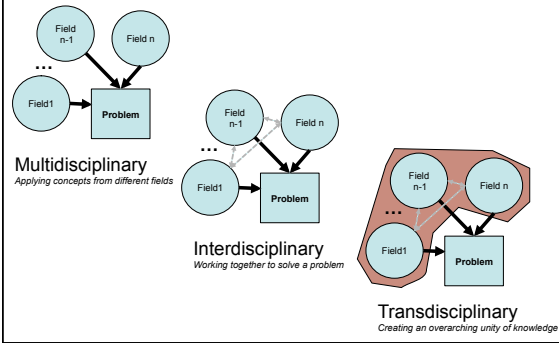
What is interdisciplinary research?

People from different areas work together to develop new hybrid topics or solve a problem.

| Research Mode | Team Leader | Collaborator | Goal/End | Problem-Oriented |
|------------------------|-------------|--------------|-----------------|----------------------------|
| APPROACH | managerial | co-operative | individualistic | multi-modal |
| INTERACTIONS PRACTICES | gathering | linking | problem | gathering and prototyping |
| KNOWLEDGE PRODUCTION | isolating | connecting | learning | connecting and learning |
| SCOPE | breadth | depth | breadth | depth, breadth and depth |
| OUTCOME | productive | productive | integrative | productive and integrative |

FIG. 3. Key research mode characteristics.

Not to be confused with transdisciplinary or multidisciplinary research...



Benefits of interdisciplinary research?

Challenges with interdisciplinary research?

Interdisciplinary Process (! Def)

| Research Mode | Team Leader | Collaborator | Generalist | Problem-Oriented |
|-----------------------------|-------------|--------------|-----------------|----------------------------|
| Approach | empirical | cooperative | individualistic | multi-discipl |
| Interdisciplinary Practices | gathering | sharing | probing | gathering and probing |
| Knowledge Structures | vertical | vertical | horizontal | vertical and horizontal |
| Scope | breadth | depth | breadth | combine breadth and depth |
| Outcomes | productive | productive | integrative | productive and integrative |

FIG. 3. Key research mode characteristics.

Interdisciplinary Process (! Def)

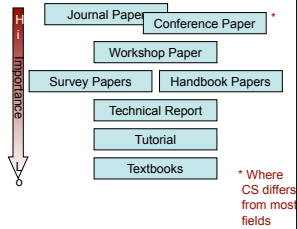
| Research Mode | Team Leader | Collaborator | Generalist | Problem-Oriented |
|-----------------------------|-------------|--------------|-----------------|----------------------------|
| Approach | empirical | cooperative | individualistic | multi-discipl |
| Interdisciplinary Practices | gathering | sharing | probing | gathering and probing |
| Knowledge Structures | vertical | vertical | horizontal | vertical and horizontal |
| Scope | breadth | depth | breadth | combine breadth and depth |
| Outcomes | productive | productive | integrative | productive and integrative |

FIG. 3. Key research mode characteristics.

- THE PI
- Respecting Fields
- Let's make this work together

Publication Issues

- Educate your collaborators about your publication process
- Schedule in time for writing
- Identify what can be published in your domain and invite collaborators as co-authors
- Publish early, publish often
- There are more (*young*) pub venues now than ever



Working together without making it too watered down...

The design of our low fidelity prototypes were informed by thirty semi-structured interviews with participants in our target user group (n=30). We counterbalanced the study by...

Working together without making it too watered down...

The design of our ^{cards with pictures of what the interface looks like} ~~low fidelity~~ ^{created} ~~prototypes~~ ^{created} were ~~informed by thirty semi-structured interviews~~ ^{informed by thirty semi-structured interviews} ~~with participants in our target user group~~ ^{with participants in our target user group} (n=30). ~~We counterbalanced the study by...~~

Working together without making it too watered down...

The design of our ^{cards with pictures of what the interface looks like} ~~low fidelity prototypes~~ were ^{created} ~~informed~~ by ^{low fidelity prototypes} ~~thirty~~ ^{created} ~~semi-structured interviews~~ ^{low fidelity prototypes} with participants in our target user group (n=30). ~~We counterbalanced the study by..~~

The design of our paper-based prototypes that showed participants what the interface would look like were designed by interviewing participants in our target user group (n=30). We ensured the study was counterbalanced (equalized) by...

Cutting down on time to get a project going...

Cutting down on time to get a project going...

- Develop a relationship with collaborators before doing research with them (if possible)
- The *paper reading bash*
- The *mini presentation bash*
- The *networking mayhem*

Looking forward

- This week
 - Wednesday: Meeting an Expert
 - Friday: Portfolio
 - Final Project Topic Report due Friday, October 10
- Next week
 - Synthesis paper presentations
 - Synthesis paper due Friday, October 17
