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# Teaming in Team Based MOOCs

# Deliberation-based Team Formation

- Maintain community connection and team connection simultaneously
- Form teams later, after community engagement has started
- Use community engagement as evidence of who would work well together
  - look for evidence in terms of important processes underlying successful collaboration
  - common ground, knowledge convergence, transactive reasoning

## **Team Formation Experiments**

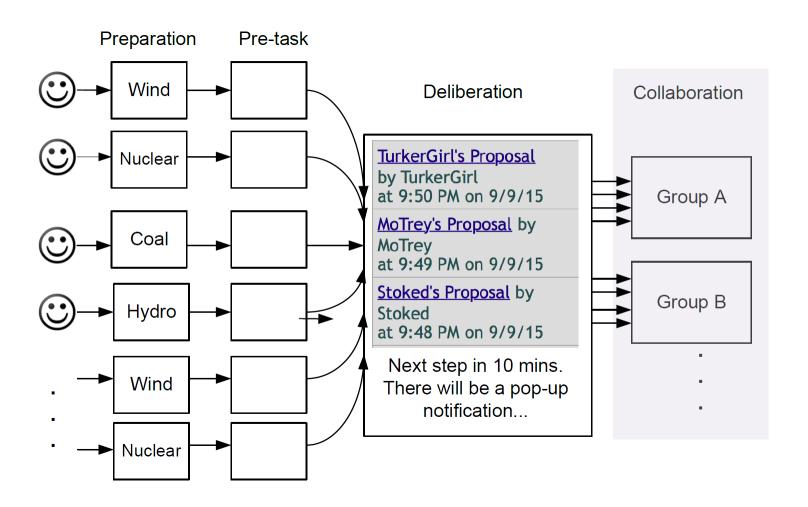
- In preparation for interventions in real MOOCs, we test our group formation hypothesis in Mechanical Turk
- Rapid iteration on experimental design

**RQ1**. Will exposure to large community discussions lead to more successful small group collaborations?

**RQ2**. Can evidence of transactive discussions during deliberation inform the formation of more successful teams?



#### **Task Workflow**



#### Results

- Teams that do pre-task deliberation in the community prior to group work demonstrate better team performance (3 s.d. effect size)
- Grouping based on transactivity maximization is better than random grouping (3 s.d. effect size)

### dLRN Applications





- Stanford OLI Stats Course
- 3 types of problems: high scaffolding highly focused, open ended, exploratory project
  - Students will do high scaffolding problems individually
  - Students will start open ended items individually, but will discuss them as a community pre-teaming task
  - Students will do exploratory projects in teams

# dLRN Applications



- Smithsonian Superheroes course
- All students get basic instruction on the genre of a superhero story and the eras of superheroes
- Progression follows the course flow
  - Students will get individual instruction on superheroes in a specific period of time (Basis for jigsaw for teams in week 1)
  - Students delve into 1 period of time and design a superhero for their period of time in week 2
  - In a community pre-teaming activity, students will critique the designs of others based on genre principles and era principles in week 3
  - Teams will develop a story line for the interaction between superheroes in a new period of time (time travel narative) in week 4 and 5