What are the impacts on cognition due to...

- **the mere presence of others?**
  - **Social Facilitation**
    - General arousal: helps familiar tasks, impedes unfamiliar tasks
  - **Social Loafing**
    - People slack off in a group
    - Effect is decreased when contributions are identified
  - **Crowding**
    - Impairs cognition
  - **Group Composition**
    - “Token” or minority members are more likely to be distracted from task
Quick Review: Levine, Resnick, & Higgins

- What are the impacts on cognition due to...
  - social roles, positions, and identities?
    - Social Roles
      - People respond to perceived perspective of the assigned role
    - Social Positions
      - People respond to the perceived abilities of the assumed position
    - Social Identities
      - Internalization of social positions/roles
Quick Review: Levine, Resnick, & Higgins

What are the impacts on cognition due to...

- mental representations of others (who are not present)?
  - Role-Taking
    - People differ in their ability to assume new roles/walk in another’s shoes
  - Reference Groups and Individuals
    - People are influenced by others/groups they deem important
  - Social Comparison
    - People’s self judgments are affected by who they compare against
  - Anticipated Interactions with Others
    - Mental preparation differs according to expected interactions
Quick Review: Levine, Resnick, & Higgins

What are the impacts on cognition due to...

- social interaction?

  - Conflict as a Source of Cognitive Growth
    - Disagreement leads to “intellectual growth” (quantity and quality of intellectual activity)

  - Majority and Minority Influence
    - Majority influence: compliance
    - Minority influence: conversion

  - Group Decision Making
    - Direct pressure from a group influences decision making
Quick Review: Levine, Resnick, & Higgins

- How does thinking about groups change the way we think about cognition?
  - Cognition as Collaboration
    - Shared Cognition
      - Shared knowledge, norms, motivation decreases performance
      - Lessens diversity, leads to “group think”
    - Group Memory
      - Distributing roles, knowledge, information with good transactions among members improves performance
  - Communication and Linguistic Interaction
    - Common ground: there are better and worse ways for knowledge transactions to occur
General Themes: Impacts on Cognition

- Motivation and level of engagement
- Self-efficacy and perceived abilities
- Social pressure
- Importance of “Healthy” interactions
How this plays out

- Designing to support social interaction
- User interfaces as social actors
Facilitating Social Cognition: Webboards
Posting a problem to a web discussion board

- What did you do before posting the first time? What was your emotional state?
- How did you know how to shape the question?
- What was the result of the exchange?
- What was the cognitive impact on your problem solving?
Tell us a story…

- Answering a question on a web discussion board
  - How did you decide to answer the first time?
  - How did you prepare your answer?
  - What was the outcome of your answer?
  - How did answering impact your cognition in that domain?
  - How did answering impact your relationship with the site?
Webboard considerations

- Social facilitation
- Social loafing
- Group composition
- Social Roles & Positions
- Reference Groups
- Social Comparison
- Anticipated Interactions
- Majority & Minority Influence
The Media Equation
The Media Equation

Media = Real Life
Media = Real Life

“individuals’ interactions with computers, television, and new media are fundamentally social and natural.” (p.5)
A variety of social psychology findings have been replicated

Replace “other person” with “computer” (or TV, image, …)

Examples: Politeness, Dominance