### **ESD.10 Class Materials**

Lecture 4 September 18, 2006

# ESD.10 Meta-Learning Objective: Appreciate the political, social, and institutional context of technological systems

#### **Current issues in technology and policy**

#### Learning to see:

Goals (equity, efficiency, security, liberty)

Problem framing (symbols, numbers, causes, interests)

Policy solutions (inducements, rules, facts, rights, powers)

#### **Learning to analyze:**

Policy analysis toolkit (positions, powers, resources, channels, windows, technology constraints and enablers)

Economics (cost-benefit analysis, pareto optimality, utility)

Term Project (conceive, design, execute a policy research project)

#### **Learning to articulate:**

Writing (policy memos, policy research studies)
Dialogue (recitations, class discussions)
Presentation (term project, group homeworks)

"Real world" experiences of policy practitioners

Impacts of globalization

## Typical NRC Report Structure

- Executive Summary
- Introduction
- Background
- Analysis and Supporting Arguments
- Summary and Conclusions
- Appendices
  - Charge
  - Bios of Committee Members
  - Participants in Committee Meetings
  - Acronyms and Abbreviations
  - Other Supporting Material

# Characteristics of High - Performance, Effective Teams

- Positive interdependence
  - Team focuses on a common goal or single product
- Individual and group accountability
  - Each person takes responsibility for both her or his own work and the overall work of the team
- Promotive interaction
  - Members do real work, usually face-to-face
- Teamwork skills
  - Each member has the skill for and practices effective communication, active and careful listening, decision making, problem solving, conflict management, and leadership
- Group processing
  - Team periodically reflects on how well the team is working, celebrates the things that are going well, and problem-solves the things that aren't