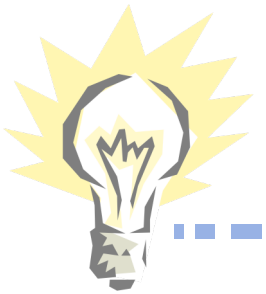
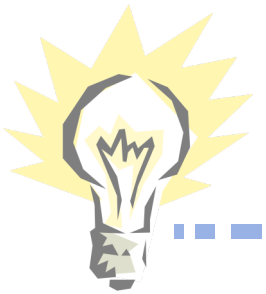
Design Implications

Learnings from the research



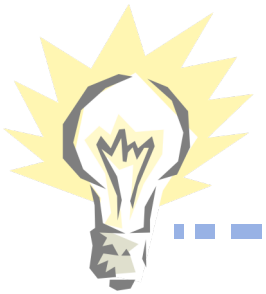
Agenda

- What have you learned?
  - Revisit the categories of data
  - Be sure the data are bulleted and lessons laid out concisely
- Brainstorm/list implications of those research findings
- Requirements definition ***defines the solution space***



Recall: Data You Are Gathering

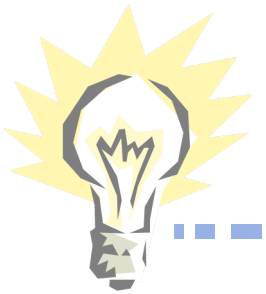
- Information about users
- Description of environment
- Major goals of the job, task, etc.
- User preferences & needs



Data Gathered, cont'd…

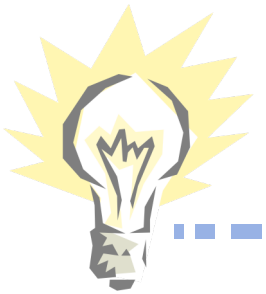
- Tasks & Subtasks:
  - Physical
  - Cognitive
  - Communication
- Conditions under which these tasks are done
- Results/outcomes of tasks
- Requirements to perform task:
  - Information
  - Communication with others
  - Equipment

Must include
Should include
Could include
Exclude



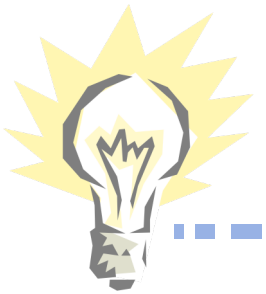
Implications for Design!!??

- Construct tables of key findings
  - Start with UCD process outline
  - Then consider User Description
- Brainstorm implications
  - Can be constraints or possibilities
  - Could, must, shall, should NOT, etc.
- Data lead to constraints in the design space



UCD: 9 Step Overview

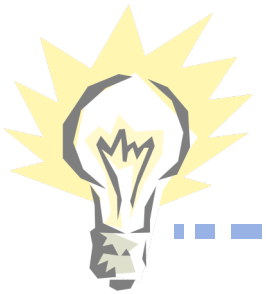
1. **Define the Context**
2. **Describe the User**
3. **Needs Analysis and Task Analysis**
4. Function Allocation & Information Architecture
5. System Layout / Basic Design
6. Mockups & Prototypes
7. Design Evaluation
8. *Iterative* Test & Redesign
9. Updates & Maintenance



Design Implications

- At each stage, consider how the details of your discovery process affect your design

Finding/Data	**Design Implications**
Users 16-80 yrs	Range of text sizes Range of grip strength
Some French speakers	Multilingual interface
Astronaut users	Extensive training available
Military context	Aesthetics less of an issue Ruggedness is critical



Recall: Overview of User Abilities

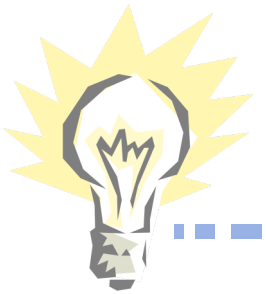
I. Senses
- A. Vision
- B. Hearing
- C. Touch
- D. Smell?

II. Information processing
- A. Perceptual
- B. Cognitive
  - 1. Memory
  - 2. Processes
    - a. Selective attention
    - b. Learning
    - c. Problem solving
    - d. Language
- C. Motor system

III. Motor system

IV. Motivations

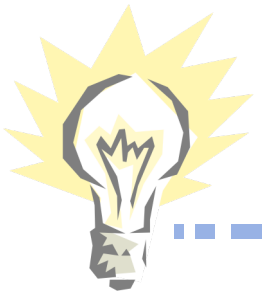
V. Social Attachments



Implications Exercise

- Situation:

- What are some facts, some learnings?
- What are the design implications?

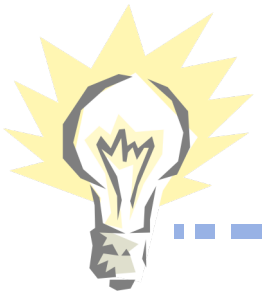


Recall the Steps:

- Tables
- Follow UCD Steps 1, 2, 3

1. Define the Context
2. Describe the User
3. Needs Analysis and Task Analysis

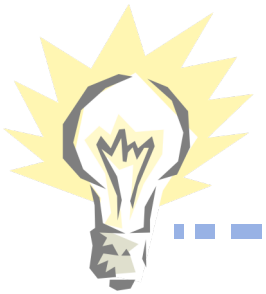
- Brainstorm implications, constraints
- Consider any "iterative implications"



Iterative Implications

- Once you start to ideate and move into possible solution spaces (or sub-spaces), consider that a new set of information, which must be iteratively folded back into the list of implications

- Example: Once you start to come up with possible solutions for the exercise (previous slide), what are new implications that you can determine?



Upcoming

- Brainstorming
- Task Flows
- Information Architecture