Overview

[ Emotional Aspects of Information Design
  - Emotions Defines
  - Practical Relevance
  - Theoretical Foundations

[ Design Activity ]
Emotions Defined
Emotions Defined—Emotions and Moods

Psychiatry: "mood" routinely used to denote states of happiness and sadness and their extremes

Emotions: person's mental state of being, normally based in or tied to the person's internal (physical) and external (social) sensory feeling

Emotions is conscious experience of affect, with attribution of cause and identification of its object
Example

How Immunization Works

5. Active Immunization

Vaccine of harmless forms of an organism
Information Design

Example

How Immunization Works

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Practical Relevance

- Emotions are inseparable from and necessary part of cognition
- Emotions affect cognition
- Cognition affects learning
  - Mood-dependent retrieval
  - Mood-congruent processing
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Mood-dependent retrieval

![Graph showing mood-dependent retrieval](image)
Mood-congruent processing
What are examples of basic emotions?

Name some basic emotions.
Seven basic emotions

- fear (or terror, shock, phobia)
- anger (or rage, directed to the self or others)
- sorrow (or sadness, or grief or depression)
- joy (happiness, glee, gladness)
- disgust
- acceptance
- anticipation
- surprise
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Emotions in ID

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**Analyze Emotional Problem**
- student based
- instruction based

**Design Emotional Strategy**
- Decrease Fear
  - a negative feeling arising from subjectively judging a situation as threatening or dangerous
- Decrease Envy
  - a negative feeling resulting from the desire to get something that is possessed by others or not to lose something that one is possessing
- Decrease Anger
  - a negative feeling coming from being hindered to reach a desired goal and being forced to an additional action
- Increase Sympathy
  - a positive feeling referring to an experience of feelings and orientations of other people who are in the need of help
- Increase Pleasure
  - a positive feeling based on mastering a situation with a deep devotion to an action

**Implement Strategy**

**Evaluate Consequences**

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*Figure 1. The FEASP approach for designing positive feeling instruction (analogous to: Keller, 1983, p. 306).*
Norman’s Levels of Emotional Processing

- Visceral Level
- Behavioral Level
- Reflective Level
Users Experience Model

- Sensual thread
- Emotional thread
- Compositional thread
- Spatio-temporal thread
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Visceral Level

- automatic, 'prewired,' genetically programmed
- response based on recognizing sensory information
- incapable of reasoning
- uses pattern matching:
  - positive affect based on food, warmth, protection
  - negative affect based on unknowns, danger indicators
- but: biological mechanism, is only resulting in predispositions
- Product characteristics: appearance
- Learning environments: _____________________________
Behavioral Level

- Controls human action and behavior
- Not conscious – automatic, routine operations
- Actions can be enhanced or inhibited by reflective level
- Can enhance or inhibit visceral level
- Product characteristics: pleasure and effectiveness of use
- Learning environments: __________________________
Reflective Level

- Contemplative part of brain
- Not bound to the immediate feelings - includes past and future
- Most vulnerable to variability through culture, experience, education, individual differences
- Can override other levels
- Product characteristics: self-image, personal satisfaction, memory
- Learning environments: __________________________
Design Activity

Instructional Information Design Task

New perspective: add emotional aspects to this design

How can emotional responses be generated?

Design an interface for a learning tool that:

- allows users to browse blogs of groups of people (e.g., students in a class),
- displays entries by topic, time uploaded, or popularity
- allows adding private or public notes for each entry
- allows adding pictures for each entry