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Representation and Interaction Design

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Overview

Emotional Aspects of Information Design

- Emotions Defines
- Practical Relevance
- Theoretical Foundations

Design Activity

Information Design

Emotions Defined

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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
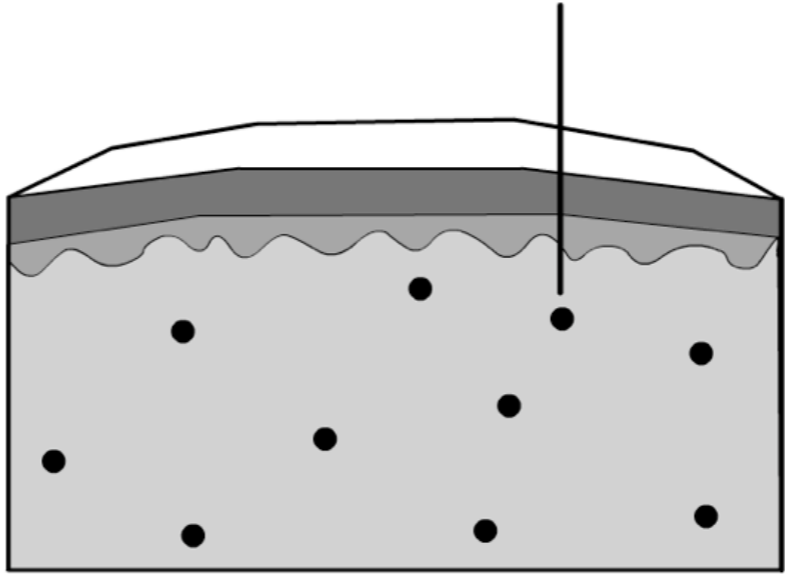
Information Design

Example

Information Design

Example

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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
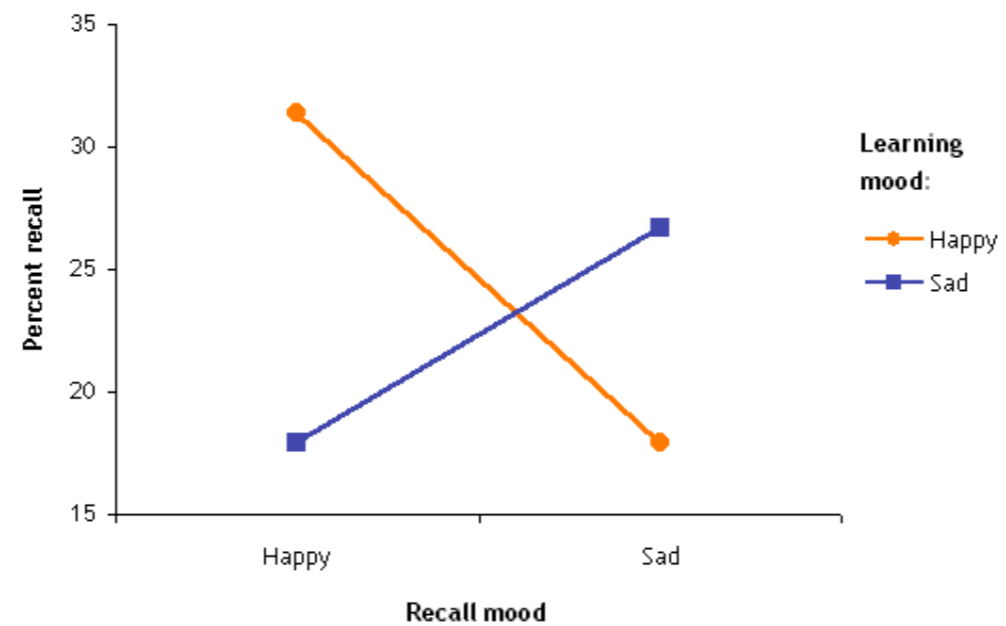
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Mood-congruent processing
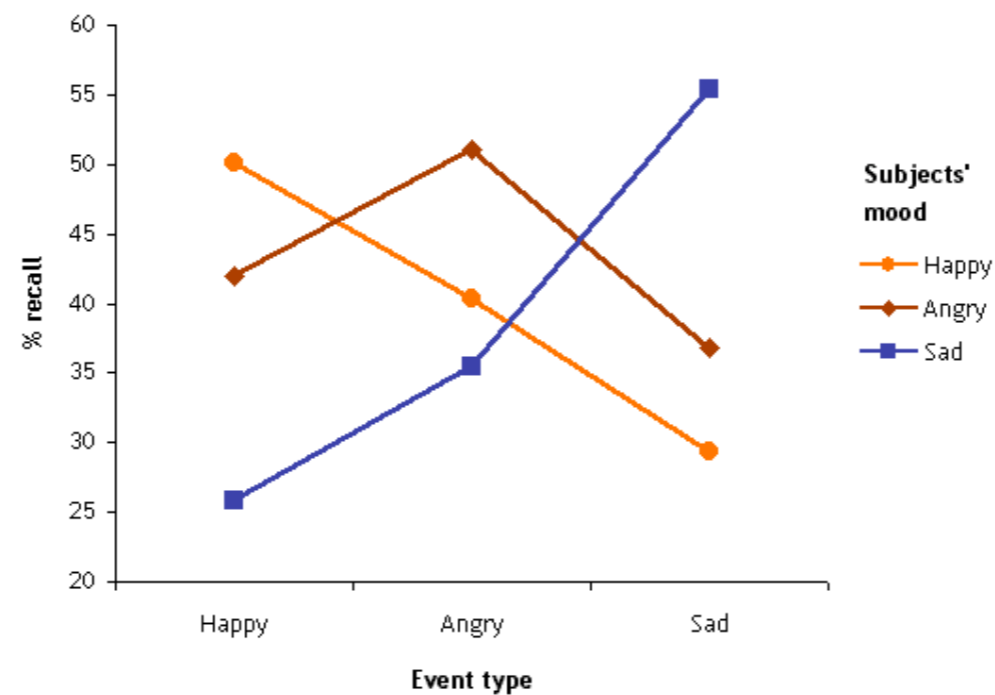
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What are examples of basic emotions?

Name some basic emotions.

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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

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
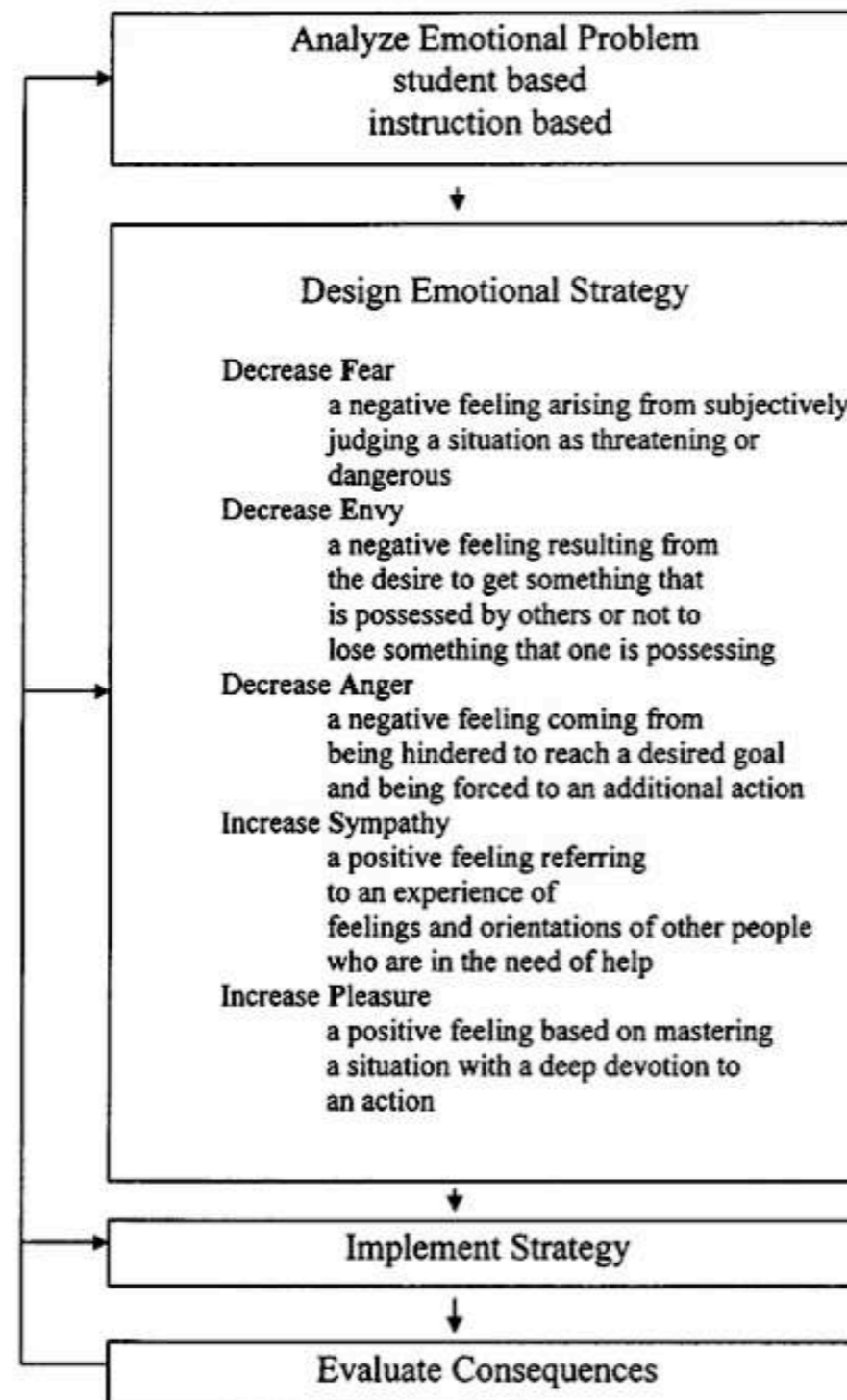
Evaluate Consequences

Figure 1. The FEASP – approach for designing positive feeling instruction (analogous to: Keller, 1983, p. 396).

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Norman's Levels of Emotional Processing

— Visceral Level

— Behavioral Level

— Reflective Level

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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: _____

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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: _____

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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