Promoting novel-shaped agricultural products

Applying the mental models approach in developing message design skills
Stages of a campaign

- Analysis of the situation
- Problem definition
- Statement of goals and objectives
Experts vs. the public: perceived general food risks

Sjöberg, L., 2012
Mental models approach
Morgan et al., 2001

**Normative:** What should people know?
- The expert model
- Methods: Interdisciplinary literature review and interviews with an expert panel

**Descriptive:** What do people already know?
- The lay person model
- Methods: Qualitative interviews and quantitative survey

**Prescriptive:** What do people still need to know?
- Identify knowledge gaps and misconceptions
- Method: Compare expert and lay person model

**Evaluation:** Does the intervention work?
Method: Determine impact through randomized controlled study
Drumming up the demand for novel-shaped fruits

What is the problem?
The goal:
To develop more positive attitudes about these products

The objectives:
1. Uncover the factors that influence consumers’ decision to purchase

2. Determine the messages and how they should be shaped.
Mental models approach
Morgan et al., 2001

1. The expert model:
Interdisciplinary literature review and interviews with an expert panel

2. The lay person model:
Qualitative interviews and quantitative survey

3. Comparing the expert vs. lay person model:
Identify knowledge gaps and misconceptions

4. Evaluation:
Determine impact through randomized controlled study
Example: Expert’s influence diagram

**Novel-shaped pears**

- **Cost and economic benefits**
  - Cost efficiency
  - Scale of operation
  - Cutting food waste
  - Niche markets
  - Trade
  - Value added
  - An economic option
  - Economic benefits

- **Production**
  - Non-conventional orchard practice
  - Accords with natural processes
  - Packaging
  - Ease of transport
  - Perishability

- **Postharvest**
  - Ease of transport

- **Environmental impact**

- **Impact on taste**
  - Effect on cellular tissue
  - Delayed or prolonged ripening
  - Religious sensitivity
  - Social preferences
  - Consumer reception

- **Consumer reaction**
  - Consumer behavior

- **Fruit characteristics**
  - Reduces pest, insect damage
  - Blight prevention
  - Need for pre-bloom sprays
  - Effect on cellular tissue
  - Delayed or prolonged ripening

- **Technology**
  - Efficiency enhancement procedures
  - Personnel training
  - Labor requirements
  - Easily accessible molds
  - Flexibility
  - Climate change adaptability
  - Functionality
  - Nutrition content
  - Appearance standard
  - Susceptibility to codling moth

- **Mold installation**
  - Ease of use
Example: Audience member’s influence diagram

- **Novel-shaped pears**
  - **Impact on taste**
    - Fruit characteristics
      - Gift uses
        - To amuse family, friends
      - Functionality
      - Nutrition content
      - Weird and wonky shapes
    - Fondness for pears
    - Cosmetically pleasing
    - Social norms
    - Novelty-seeking, need for variety
    - Food safety
  - Consumer reaction
  - Cost and economy
    - Price
      - Effect on farmers' income
      - Where to purchase
  - Production
    - How shape is achieved
  - Postharvest
    - Packaging
    - Ease of transport
    - Perishability
1. What are the three most important things you would like your audience to know?
   - Highlight value as unique gift products despite cost.
   - Emphasize the mechanical shape-forming process (i.e., not genetically modified)
   - Nutrition content is the same as regular pears.

2. What are the three most important things your audience would like to know?
   - Although nonconventional, production practice is in accord with natural processes
   - Cost likely to vary according to distance from source.
   - Undergoes the same safety inspection procedure as regular pears.
3. What are the three most important things your audience is most likely to get wrong unless they are emphasized?

- Changes in taste due to “disrupted” development process
- Income and/or benefits accruing to farmers
- The economic value of niche markets
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Student feedback

1. “Strong people-orientation” demystifies initial perceptions of the “tediousness” of conducting research

2. Purposive methods introduce undergrads to the value of applied research

3. Demonstrates a research-based and systematic approach to message identification and message design
COMMUNICATE BECAUSE I AM PASSIONATE ABOUT FOOD, AGRICULTURE, AND THE ENVIRONMENT.

Agricultural communications: scientific acumen + communication savvy

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