Create Diversity in Community Food Safety Education: Practices in Kansas

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Kansas Department of Agriculture
Theories and Models Applied in Food Safety Education
Food Safety Education Practices
Promoting Chinese Food Culture
Characteristics of the Practice in Kansas

- Multiple Purposes
  - Increase Chinese Culture Awareness
  - Build Community Relationships
  - New Model of Food Safety Education
- Align with our Mission Statements
- Cross-institute Collaboration
- Quantitative and Qualitative Research
Program Goals: Align with the Mission

MISSION: The Kansas Department of Agriculture is committed to a balanced approach of:

• Serving Kansas farmers, ranchers, agribusinesses and the consumers/customers they serve;
• Providing an environment that enhances and encourages economic growth of the agriculture industry and the Kansas economy; and
• Advocating for and promoting the agriculture industry, the state’s largest industry, employer and economic contributor; while
• Helping to ensure a safe food supply, protecting natural resources, promoting public health and safety, protecting animal health, and providing consumer protection to the best of our ability.
Program Goals: Align with the Mission of Land-grant University
Program Goals: Align with the Missions of Multiple Stakeholders
Partners Roles:

- K-State Confucius Institute
- Kansas Department of Agriculture (KDA)
- K-State Research and Extension (KSRE)
- Chinese Restaurant Chefs
- Professors
- Community Members
Program Goals: Chinese Culture Awareness and Diversity
Program Goals: A Combined Model of Community Food Safety Education
Program Goals: Community Relationship Building
2019 CONFERENCE

From Consumers to Chefs

FOOD SAFETY EDUCATION MATTERS
• Implementation: Surveys
Implementation: Event Map
Data Collection and Sample size

- 8 Dec 2017 = 9 participants
- 17 Jan 2018 = 16 participants
- 31 Jan 2018 = 18 participants
- Feb 28 = 21 participants
- March 14 = 17 participants
- April 25 = 40 participants
- May 9 = 15 participants
- May 23 = 25 participants
- Total = 161
Survey Results: How often do you eat at the following types of restaurants?

How likely/unlikely you eat at following restaurants:

<table>
<thead>
<tr>
<th>Type</th>
<th>Unlikely</th>
<th>Neither likely nor unlikely</th>
<th>Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>11.1%</td>
<td>13.7%</td>
<td>75.2%</td>
</tr>
<tr>
<td>American</td>
<td>13.9%</td>
<td>9.6%</td>
<td>76.5%</td>
</tr>
<tr>
<td>Mexican</td>
<td>7.8%</td>
<td>13.0%</td>
<td>79.1%</td>
</tr>
<tr>
<td>Thai</td>
<td>29.7%</td>
<td>27.0%</td>
<td>43.2%</td>
</tr>
<tr>
<td>Italian</td>
<td>20.9%</td>
<td>16.5%</td>
<td>62.6%</td>
</tr>
</tbody>
</table>

% basis
Rank in order of motivation, 1 (most motivating) to 5 (least motivating reason) the reason why you participated in this event?

Based on Chi-Square test, distributions were significantly different; p-value < .0001
Lacking in Chinese cooking skills?

Based on Chi-Square test, distributions were significantly different; p-value < .0001
Temperature danger zone

Which of the following is temperature danger zone?

Frequency basis

Based on Chi-Square test, distributions were significantly different; p-value <.0001
I enjoy experience and learning about other cultures
I have a good relationship with other participants
I have a good relationship with local restaurant owner
I am concerned about food safety issues
I have a good relationship with K-State research and extension
I have good relation with KDAI

% basis

Based on Chi-Square test, distributions were significantly different; p-value < .0001
How much you agree or disagree with the following statements?

- From this experience, I learned more about Chinese culture
- During this experience, I learned new recipes that I can make at home
- I learned ways to keep my food safe while cooking
- I feel it is helpful to build good community relationship

% basis
Please put in order from most influencing to least influencing your food safety behavior?

<table>
<thead>
<tr>
<th>Activity</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT Presentation</td>
<td>4.7</td>
<td>7.4</td>
<td>33.3</td>
<td>10.2</td>
<td>13.0</td>
<td>28.0</td>
</tr>
<tr>
<td>Communication between participants</td>
<td>30.8</td>
<td>13.9</td>
<td>9.3</td>
<td>14.8</td>
<td>10.2</td>
<td>25.2</td>
</tr>
<tr>
<td>Recipe’s presentation</td>
<td>4.7</td>
<td>21.3</td>
<td>25.9</td>
<td>12.0</td>
<td>14.8</td>
<td>18.7</td>
</tr>
<tr>
<td>Questions and Answers</td>
<td>12.1</td>
<td>13.0</td>
<td>13.9</td>
<td>23.1</td>
<td>23.1</td>
<td>13.1</td>
</tr>
<tr>
<td>Demonstration of the Chef</td>
<td>21.5</td>
<td>21.3</td>
<td>8.3</td>
<td>19.4</td>
<td>23.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Personal practice</td>
<td>26.2</td>
<td>23.1</td>
<td>9.3</td>
<td>20.4</td>
<td>15.7</td>
<td>7.5</td>
</tr>
</tbody>
</table>

% basis

Based on Chi-Square test, distributions were significantly different; p-value < .0001
Key learnings

• To increase participation in Food Safety Classes, we need to incorporate interesting components, such as culture, cooking skills.

• Collaborations simplify the work.

• Kansas Model:  
  Culture + Food Safety + Community Relationship Building
• Chinese Version Food Safety Education - Handouts
• Chinese Version Food Safety Education - Lectures
• Chinese Version Food Safety Education: Top-notch Chinese Chefs
Endless Potential

• Duplication of this Model
  ✓ Minnesota
  ✓ Missouri
  ✓ New York

• Recreate this Model Event in your city/state.
• Thank You for Your Attention!
Which of the following can cause food unsafe?

- Time-temperature abuse
- Cross-contamination
- Poor personal hygiene
- All of the above

Which of the following can cause food to unsafe?

- Frequency basis
Survey Results: Demographics

- **Gender**
  - Male: 20
  - Female: 120

- **Ethnicity**
  - African American/Black: 0
  - Hispanic/Latino: 0
  - Asian: 0
  - Pacific Islander: 0
  - American: 0
  - Caucasian: 120

Frequency basis
Which of the following is temperature danger zone?

- Pre-survey
- Post-survey

Frequency basis
Surfaces that touch food must be?

Surfaces that touch food must be ...
When preparing food, one should wash their hands before and after:

- Taking out the garbage
- Touching clothing or aprons
- Handling raw meat, poultry or seafood
- Using a cell phone, tablet or computer

Frequency basis
Classify the microorganisms:

- **Bread mold**
  - Pre-survey
  - Post-survey

- **Food borne illness**
  - Pre-survey
  - Post-survey

- **Yogurt**
  - Pre-survey
  - Post-survey

Frequency basis
What should cut first?

- Meat
  - Pre-survey
  - Post-survey

- Veggies
  - Pre-survey
  - Post-survey

- Lettuce
  - Pre-survey
  - Post-survey

- Bread
  - Pre-survey
  - Post-survey

Frequency basis