



**Utilizing Chinese Culinary Events to Build Community Relationships,  
Multicultural Awareness, and Food Safety Training Models**



Center for Engagement and Community Development  
Engagement Incentive Grants

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## Utilizing Chinese Culinary Events to Build Community Relationships, Multicultural Awareness, and Food Safety Training Models

**Needs Analysis:** Foodborne illness remains a significant threat in the United States among all age groups. CDC estimates that each year roughly 1 out of 6 Americans (or 48 million people) get sick from foodborne illness, 128,000 are hospitalized, and 3,000 die from it. A 2012 USDA study model estimated that the aggregated cost of foodborne illness is \$77.7 billion per year. The latest CDC Annual Report shows, 63% of foodborne disease outbreaks were attributed to restaurants and 12% to a private home. World Health Organization(WHO) indicates that most foodborne diseases can be prevented by following simple food hygiene steps; CDC also points out that reducing foodborne diseases is a winnable battle. However, change in human behavior is not easy. Numerous food safety training programs are based on the knowledge-attitude-behavior (KAB) model, among which the most widely accepted program is the ServSafe which issued 5 million certificates to date. Hundreds of articles have been published based on the Theory of Planned Behavior(TPB) in the last two decades but mostly focus on attitudes, perceptions, beliefs, normative, motivations, etc. Till now, no mature training programs are based on TPB on food safety training. Despite all the efforts, **the CDC survey shows that the incidence of infection was still higher in 2012 compared with 2006–2008** for *Campylobacter* (14% increase) and *Vibrio* (43% increase) and **unchanged for other pathogens.** The following are **unsolved questions listed on the CDC website:** What would be the impact of basic food safety education of restaurant workers on the risk of foodborne disease among restaurant patrons? How can basic food safety principles be most effectively taught to school children? How can we be sure food safety standards in other countries are as good as those in the United States? ***This shows that there is a strong need to find effective approaches for food safety training contrary to previous knowledge-based, top-down, homiletic, and lecture styles.***

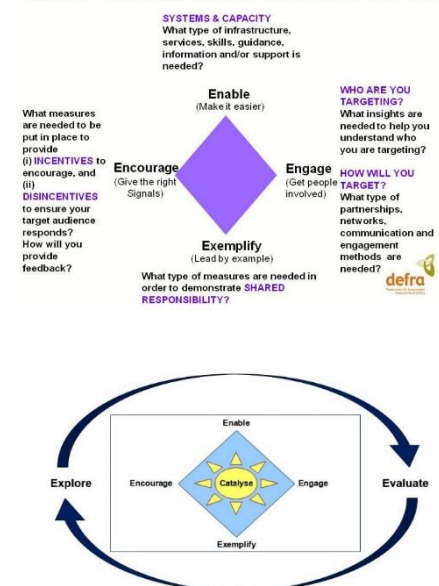
Human is such a complicated creature, for which its nature is profoundly moral, social, and emotional. "Simpler models run the risk of missing out key causal influences on a decision by omitting key variables." A 4 E's Model and enhanced 6 E's Model was used to effectively solve public behavior changes related to social welfares by governments and nonprofit organizations in Europe (see figures). ***Those social behaviors resolved by these models like smoking, drunk driving, recycling, organ donation and so forth are similar to the food safety behavior.*** They all have a significant impact on the social economics and welfare, but people need to exert much effort in order to change their behavior for the benefits that are neither obvious nor immediate. The government can use legislations and regulations to compel people to act in certain ways. However, sometimes the less coercive measures, such as engagement, incentives and information provision as well as sophisticated communication are more efficient. There is no single solution to influencing behavior. The 6 E's Model provides one practical tool to ensure a mixture of interventions by involving these six dimensions: Enable, Engage, Encourage, Exemplify, Explore and Evaluation.

***Based on the 6 E's Model, this project is to pilot several multi-disciplinary, community-engaged, cross-institutes, and research-based models for community relationship building and food safety behavior training to protect people's health and reduce the economic burden of the society.***

### **Proposed Engaged Activities:**

This project uses the Chinese culinary class as its platform from which people would like to learn cooking skills to enrich their lives. **To take the community relationship building as the base and framework,** the principal investigator will integrate the K-State Confucius Institute(CI) staff, inspectors of Kansas Department of Agriculture(KDA), K-State Research and Extension(KSRE) specialists, Chinese Restaurant owners/chefs, faculty from K-State departments, and the community members into the platform to complete the tasks together. **The Chefs** from the local Chinese restaurants will use their expertise to serve as the instructors for teaching classes in their neighborhood. **The KDA**

Figure C - Sustainable Development Diamond / 4Es



inspectors will communicate with the instructors for supporting them to demonstrate correct food safety behaviors before the class, deliver some necessary information, and provide explanation during the activities.

**A practical, enjoyable Chinese culinary class will serve as an occasion for inspectors, restaurant professionals, and the community to interact with each other. *We also anticipate that with the integrated intervention measures such as friendly conversation with the inspectors, in-person demonstration by the chefs, and hands-on practice by the participants, the food safety behavior level of the community members and restaurant professionals will improve. We aim to develop innovative training programs based on the 6 E's models and the data collected.***

#### **On and off Campus Collaborative Partners and Their Roles:**

**Shijun Yan**, the Principal Investigator of this proposal has diverse educational and occupational background related to public health and international collaboration. The PI works at **K-State Confucius Institute** with twenty years of administrative experience and is competent in coordinating different groups of people to get involved in the project.

**Autumn Schuck** is an Inspection Manager of Kansas Department of Agriculture (KDA) for Food Safety and Lodging Program, who is responsible for food safety inspection of the restaurant industry at the state level and in charge of 43 field inspectors who can help and involve in this program for community relationships building. This project is expected to discover a new effective way to solve the problems which the inspectors frequently meet in their field inspections of local Chinese restaurants.

**Steven Moris**, the program director of Kansas Department of Agriculture also officially signed a support letter to promote this project. **Kristin Malek** is an assistant professor in the Department of Hospitality Management at K-State., who is an expert in event organization, statistics, and event food safety research. She will help the PI to design scientific research methods, apply for Institutional Review Board (IRB) approval, and perform statistical analysis. **Sharolyn Jackson** is a specialist working at the K-State Research and Extension(KSRE), who have a broad network in all counties around Kansas and can facilitate to connect the CI with the local communities. **Martin Talavera**, assistant professor in Sensory and Consumer Research Center at K-State Olathe, will conduct sensory analysis research qualitatively and quantitatively. He will use his expertise to help the PI to design the scientific methodology which focuses on the behavior changes by the integrated interventions through the events. **Bryan Severns** is a manager of Food Programs and Services at K-State Olathe. He is experienced in cooking, food safety training, and administrative tasks important for this project. His role in this project will be to coordinate and teach the culinary events around Olathe and Kansas City areas.

This project also opens up community serving and learning opportunities for students majored in psychology, sociology, social work, public relations, communication, or humanities to be involved in the community relationship building, cultural understanding parts. It also provides chances for students who major in journalism and digital media, family consumer science education, hospitality management, hotel and restaurant management, MPH, dietetics, human nutrition and health, statistics to participate in the cooking class, nutrition study, food safety training, videotaping, editing and media marketing etc. **Students** will use the project to fulfill service learning, scientific thinking, community engagement, and career preparation, etc. **Community members** will join the program and do hands-on practice on what they learn about Chinese cooking, and meanwhile improve their food safety behavior. **The Chinese restaurant owners/chefs** will instruct and demonstrate the culinary class.

**It is a strong team consisting of members and partners who have the expertise for event organization, resource coordination, community networks, government involvement, and research design, which will guarantee full implementation of this project.**

#### **Short Term Goals:**

Through a series of cross-institutional, multidisciplinary, research-based culinary classes, this project will: 1) Enrich community residents' cooking skills with hands-on practice, 2) improve the relationship between Chinese restaurant industry and their local communities; 3) connect the KDA inspectors to local communities, 4) set up a new type of relationship between KDA inspectors and restaurant industry, which is different from the traditional top-down style; 5) involve students in service learning. 6) Improve the diversity of the local community and increase cultural understanding, 7) enhance the original network of the KSRE, 8) discover a new approach to establishing good community relationships among stakeholders related food safety behaviors. 9) improve the food safety behavior levels of restaurant workers, and community members, 10) set up a new, effective food safety training module for community members and Chinese restaurant workers. 11) Publish research articles in reputed journals, 12) present this project at professional conferences.

### **Long Term Goals:**

1) Set up models for community relationships through other ethnic activities; 2) promote the pilot food safety model in other Kansas counties; 3) testify the 6 E's model with the data collected from this project and contribute to its improvement; 4) develop this training model to other ethnic restaurant industries or non-ethnic restaurant; and 5) hope this model could be adopted by the restaurant industry and the government. 6) develop grant proposals for external funding to further the research. The team members plan to seek external funding from USDA National Institute of Food and Agriculture(NIFA), Agriculture and Food Research Initiative (AFRI); Overseas Chinese Affairs Office in China on food safety training programs for Chinese overseas restaurant workers; Culinary class combine food safety behavior training to school children and 4-H youth training, etc.

### **Impacts on all parties:**

**Impacts on CI:** this project can promote Chinese food culture and culture understanding in Kansas communities.

**Impacts on KDA:** 1) improve food safety behavior to community residents and restaurant workers who are the primary source of foodborne illness and 2) reduce its human power cost which was led by follow-up inspections.

**Impacts on KSRE:** 1) create a new diverse community relationship between local inhabitants and Chinese restaurant and 2) help them to enhance culture understanding. 3) help the KSRE fulfill its mission of increasing community members' living skills on cooking and their health welfares.

**Impacts on the Chinese restaurants:** 1) promote their popularity among local communities, 2) improve their code compliance and create a food safety image for their brands.

**Academic Impacts:** 1) Provide a platform for students to practice service learning; 2) community engagement, 3) improve their scientific thinking and preparation for the future careers.

**Impacts on K-State:** 1) Fulfill its community outreach commitment as a land-grant university, 2) Enhance its faculty's network with the government, the restaurant industry, and the community members; 3) publish peer-reviewed articles under the name of K-State.

**Impacts on the local community:** 1) members can learn new skills for cooking ethnic foods and 2) improve their food safety behavior level to reduce the possibility of getting a foodborne illness. 3) establish a good relationship with different groups of people.

**All parties will benefit from the good relationship built by this project. In addition, the whole society will benefit economically by fewer incidence of foodborne illness.**

### **Accomplishment Benchmarks:**

**Academic Benchmarks:** 1) recruiting students from different majors to get involved in the program to nurture their service learning, scientific thinking, effective communicating, culture understanding and community relationship building. 2) Help students to achieve their respective academic goals with this multi-disciplinary collaborative platform.

**Research Benchmarks:** 1) set up a pilot community relationship building model for Chinese food culture understanding, and for food safety stakeholders; 2) discover a new approach for food safety training.

**Event Organizing Benchmarks:** 1) coordinate Chinese culinary class at selected counties; 2) invite celebrity Chinese chefs to demonstrate skills; 3) organize Chinese cooking contest in Kansas communities; 4) complete series of videos on Chinese dishes cooking, and food safety training, and put them online for the community residents complementary.

**Community Relationship Benchmarks:** 1) Strengthen relationships between the government, restaurant industry, KSRE, CI, researchers and community members; 2) build interdisciplinary faculty-student relationships in the process of event organizing, service learning, scientific research and problem solving.

### **Budget and Matching Resources:**

The principal investigator request \$10,000 to cover the culinary classes and the research expenses of the project, including compensation for involved students, survey compensation fees involving data collection, attending professional conference, paper publication etc. The Confucius Institute at K-State will provide matching funds of the insufficient part in addition to the event-organizing expenses during the project period, like facility rental, food supplies, etc. Please see the letter of support attached to this proposal.

### **Timeline:**

This project will be conducted in four phases: The team will begin phase one which includes research design, facility locating and students recruiting upon the approval and notification of this grant on May 1st, 2017. In 2017 Fall to 2018 Fall term, the second phase of this project will begin to organize the culinary classes in selected counties. wherein students will play a role for advertising, marketing, event organization, class support, research assistance, etc. In phase three, the team then analyzes project research, sums up the experience, improves the research design and continues the culinary class in the meantime. In phase four the team will publish peer-reviewed articles and prepare external grant funding.