O11 (continued)

dietetics education given the growing diverse population in the United States.

Description: A list of cultural competency topics from the cultural foods course learning objectives were used to develop questions to elicit knowledge and application of these topics to two case study assignments in MNT-II.

Evaluation: A cultural competency rubric was developed and tested for reliability to assess question responses. Two sets of questions were included in two consecutive case studies. The first case study did not include the term “culture,” used in the second.

Conclusions and Implications: Students who completed the cultural foods course on average scored higher in the first case study using the cultural competency rubric, 2.01/10 versus those who did not, 0.96/10 ($P \leq 0.037$). Results also identified cultural competency topics for improvement, such as preferences or avoidances related to religion. We can conclude that students who completed the cultural foods course were more likely to apply cultural competency knowledge and skills without explicit elicitation compared to those who had not completed the course; indicating learning transference.

Funding: Future Academic Scholars in Teaching Fellowship, Center for the Integration of Research, Teaching, and Learning, The Graduate School-Michigan State University.

O12 Creating a Continuum for Latino-Focused Nutrition Education

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Objective: A pipeline for nutrition education (NE) ideally flows from the university to the local community creating an environment for improved health awareness, nutrition knowledge, and eating/physical activity behavior. Three objectives of a five-year, transdisciplinary grant are to develop and institutionalize a ‘Graduate Certificate in Latino Health and Nutrition Studies’ for students to gain knowledge, skills and confidence in their future profession from courses and service-learning activities, for local community programs to partner as training sites, and for a high-risk Latino community to receive culturally-relevant NE to increase health equity, potentially reducing obesity among families.

Target Audience: All graduate students at CSULB, CBOs, and Latino families with children (ages 2-8).

Theory, Prior Research, Rationale: Principles of Community Based Participatory Research (CBPR) were used to integrate university activities with community education.

Description: Six 3-unit courses were developed, 4 community partners identified, and 8-topic charla developed and implemented at partners’ sites.

Evaluation: The ‘Graduate Certificate’ was institutionalized, 86.8% follow-up rate achieved at three-month assessment; significant increases in knowledge, psychosocial and behavioral variables were observed.

Conclusions and Implications: By developing Latino health-focused, college-level courses enriched with experiential learning, culturally-competent students and faculty in nutrition and health science disciplines create a sustainable pipeline for NE. CBPR can facilitate increases in positive behavior change to reduce health disparities among the growing U.S. Latino population.

Funding: USDA Grant #2011-67002-30152.

O13 Development of a Framework that Describes how Gardens Become Integrated and Sustained in Elementary and Middle Schools

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Objective: Researchers have explored the impact of school gardening on students, but little is known about how to establish school gardens so that they are integrated with academics, valued by the school community, and sustained over time. This study explored how the components of the School Garden Domains (SGDs, three domains with 18 components, described in the literature) are related and can be visually represented as an implementation framework to help schools integrate and sustain gardens.

Design, Setting and Participants: School gardeners at 21 schools with well-integrated gardens in Manhattan, Brooklyn, and the Bronx participated in semi-structured interviews and concept mapping exercises during the 2013-2014 school year.

Outcome Measures and Analysis: Interviews were qualitatively analyzed using pattern matching, explanation building and cross-case synthesis. To analyze the concept mapping exercise, a similarity matrix was created to conduct multi-dimensional scaling and hierarchical cluster analysis of participants’ sorted statements. Additional qualitative analysis of the concept mapping exercise explored patterns and trends in sorting the 18 components and components added.

Results: The analysis resulted in the School Garden Integration Framework (SGIF), consisting of 4 domains: resources and support, physical garden, student experience, and school community. The SGIF represents how and when to implement the 19 components (one added) in order to best establish and/or integrate a school garden.

Conclusions and Implications: The SGIF can be used by anyone interested in establishing, integrating, or expanding the reach of their school garden. The SGIF can

O13 (continued)

also be used by policymakers to create best practice guidelines and policies to “grow” well-integrated school gardens.
Funding: None.

O14 Healthy Being – Improving Nutrition Practices Among Children and Teens Through Art and Games

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Objective: Healthy Being (HB) focuses on improving the nutritional status of 4,310 children (6-12 years) through art and games.

Target Audience: Approximately 39,000 indirect beneficiaries -parents, teachers and local stakeholders- from two communities in Chimaltenango will be reached and trained, in partnership with local theater groups, the Ministry of Education, and Municipal Authorities, supported by the FEMSA Foundation.

Theory, Prior Research, Rationale: Cardenas Silva, 2006 and J. Barojas, 1999, have advocated using games and art as attractive teaching resources that stimulate participation, awareness, self -knowledge and learning. Guatemala has the highest prevalence of chronic child malnutrition among elementary school children and adolescents in Latin America, ranking third worldwide. The province of Chimaltenango has been classified as a very high risk region with 53.9% chronic malnutrition.

Description: HB implements nutrition improvement through an innovative approach based on theatre, song, poetry and drawing. HB staff has scheduled six monthly training sessions for parents and teachers in school grounds during regular hours. Additionally, one hundred HB trained local teens will deliver culturally appropriate food and nutrition security messages through theatre, creative games and artistic competitions to create awareness of positive nutritional practices increasing water, animal source, fruits and vegetable consumption.

Evaluation: The messages were identified in the baseline and formative research. Sustainability and scale up will be achieved through partnerships with schools and influential community stakeholders. Teachers and parents are supporting the project.

Conclusion: The project baseline revealed that although children, teens and parents have basic nutrition knowledge, their daily meals lack vegetables, fruit, protein and clean water.

Funding: FEMSA, Coca-Cola.

O15 Process Evaluation Measures Effectively Assess Fidelity of Fuel for Fun Classroom Lessons

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Objective: To assess fidelity of Fuel for Fun cooking and tasting classroom lessons in year 1 of program intervention using 3 process evaluation measures.

Design, Setting and Participants: Process evaluation conducted in year 1 of Fuel for Fun intervention, a school-based participatory research program delivered in 8 schools in 22 4th grade classrooms. Intervention includes 5 cooking and 5 tasting lessons in classrooms.

Outcome Measures and Analysis: Classroom lesson debriefing form completed by educator after each lesson; tested classroom lesson observation form completed by evaluation personnel; and weekly team meeting transcripts. Assessed fidelity to lesson components with checklist (highest possible score 21 cooking; 17 tasting), classroom management (3= no problems, 1= major problems), and student engagement (4= actively involved, 1= uninterested) using descriptive statistics and thematic analysis of observation comments.

Results: 214 classroom lesson debriefing forms, 14 classroom lesson observation forms (5 cooking, 9 tasting), and compiled meeting transcripts were completed in year 1 of intervention. Mean scores were 18.6 and 15.2 for cooking and tasting lessons components, 3.0 for classroom management, and 3.8 for student engagement. Thematic analysis revealed 3 themes. Keeping children as engaged as possible at all times with hands-on- activity is a priority. Reinforcement of student behavioral expectations with every lesson was beneficial, and educator flexibility is critical when working with teachers and students in the classroom.

Conclusions and Implications: Classroom lesson fidelity was maintained while remaining flexible to the classroom situation. Process evaluation measures were valuable in assessing lesson fidelity in year 1 and in providing direction for future intervention implementation.

Funding: NIFA.

O16 Improving Nutrition Knowledge, Attitude and Behavior of Selected Filipino Schoolchildren in the Healthy Kids Program

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Objective: This study evaluated the effects of a school-based nutrition education intervention (Healthy Kids Program) on the knowledge, attitude and behaviour of schoolchildren.

Design, Setting and Participants: The experimental design with intervention and non-intervention groups was used. The project was conducted in two public elementary schools in the rural town of Bulacan in the Philippines among 200 schoolchildren aged 9-10 year old grouped into intervention (n=100) and non-intervention (100). Two periods of data collections were conducted in both

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