ABSTRACT
A special event “Spring into Summer at the EMU Demonstration Kitchen” was held to promote a new demonstration kitchen to the campus and local community and increase its use. A faculty member mentored a graduate student who planned, organized, and implemented a marketing plan for the event using funds from an entrepreneurial grant. The event featured culinary demonstrations; it was well attended and evaluations were positive. The student applied entrepreneurial knowledge and skills and awareness of the demonstration kitchen increased. The project outcomes will provide ideas for educators with on-campus demonstration kitchens and/or nutrition services who are interested in enhancing students’ marketing skills and marketing their services.

Keywords: Demonstration kitchen, culinary demonstration, entrepreneurship, event planning, event marketing

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INTRODUCTION
Eastern Michigan University (EMU) is a public university in Ypsilanti, Michigan that currently serves 23,000 students. This university offers more than 300 majors and supports students pursuing undergraduate, graduate, specialist, and doctoral degrees, and certificates (Eastern Michigan University, 2016). The EMU College of Health and Human Services (CHHS) offers a Master of Science in Human Nutrition and a Coordinated Program (CP) in Dietetics at the bachelor and master level. The CP curriculum focuses on preparing students for careers as registered dietitians while providing 1,200 hours of supervised practice experience (Eastern Michigan University, 2016).

The EMU CP is unique as it is one of only two schools of 56 CPs in Dietetics in the U.S. with a business entrepreneurial concentration. Undergraduate and graduate students in the CP are required to take Dietetics 459 or Dietetics 659, Development of the Entrepreneurial Dietitian, in the summer semester following the first year in the CP. Both courses focus on planning and marketing businesses and include writing a business plan. The textbook, The Entrepreneurial Nutritionist, is used for both courses (King, 2010). The book includes chapters on creativity, marketing, and Internet promotions. Additionally, entrepreneur-based journal articles from the Journal of Foodservice Management & Education, Volume 11, Number 2, Pages 17–21. ©2017 Published jointly by the Foodservice Systems Management Educational Council and the National Association of College & University Food Services

of the Academy of Nutrition and Dietetics are included as readings for the course.

EMU has an Office of Nutrition Services (ONS) under the direction of a registered dietitian to provide CP students with entrepreneurial-focused supervised practice while providing nutrition services to staff, faculty, students, and the community. The ONS offers nutrition counseling, analysis of three-day food records, dual-energy x-ray absorptiometry, bioelectrical impedance analysis, and outreach on campus and in the community (Eastern Michigan University, 2016).

Due to the growth of the CHHS and increased participation in nutrition education programs on campus, ONS moved into a newly-designed space in October, 2015. The dietetics program director, faculty, and staff from EMU Dining Services were involved in planning the space. The new space includes offices, a focus group room, counseling rooms, and a demonstration kitchen designed for CP students to conduct culinary demonstrations and nutrition education presentations during their dietetics courses, including community nutrition and seminar in dietetics. Development of culinary skills enhances students’ ability to educate others, including community members and foodservice employees.

Description of EMU Demonstration Kitchen
The demonstration kitchen features marble countertops with a tiled backsplash and wall of cabinetry including a stainless steel refrigerator, two convection ovens, and a two-bay sink. In front of this cabinetry is an island constructed to support the ergonomic flow of culinary demonstrations. The island is equipped with under-the-counter refrigerators, a hand washing sink, and a gas stove top with a discrete ceiling fire suppression system and hood system. In addition, it features a camera system that permits video recording and the ability to display culinary demonstration techniques from desired angles on three large, flat-screen televisions. The demonstration kitchen also includes a walk-in pantry and scullery equipped with a dishwasher, three-compartment sink, washer, dryer, and mop sink.

The kitchen seats 26 in its unique three-tier seating arrangement. The space where attendees sit features portable tables that extend across the room to create three rows. The rows of tables are positioned at gradual increasing heights, with the highest table positioned along the back of the room. Adjustable chairs allow attendees to position themselves for optimal viewing purposes. The kitchen is available for rent by EMU faculty, staff, students, and members of the community. The kitchen had been used for a limited number of occasions, but needed to be marketed to expand use of the kitchen to promote community nutrition and wellness and to increase income for ONS.

Demonstration Kitchens at Universities
Many universities have demonstration kitchens for education and community outreach. Drexel University has a residential housing project that is geared toward students attending the school's
hospitality and sports management programs (Kostelni, 2016). The project features a food laboratory and a commercial kitchen. The space can be used by student chefs as well as a place to host demonstrations by celebrity chefs. Furthermore, an incubator, pop-up restaurant concept and garden for the kitchen and food laboratory are in the project’s design.

Purdue University features a demonstration kitchen on campus where students teach attendees about culinary techniques, nutrition, and food sanitation (Purdue, 2016). Courses are offered to attendees at a low rate and cover topics such as super foods, clean eating, protein shakes and snacks, vegetarian meals, and Mediterranean cuisine. The University of North Dakota features a similar demonstration kitchen in their Health and Wellness Center called Culinary Corner (“University of North Dakota”, 2016). The kitchen offers cooking classes and hosts nutrition presentations and speakers. Cooking class instructors include University of North Dakota students and guest chefs from the community. Another event, Team Cook-Off, offers a friendly competition based on the Food Network television show Iron Chef America.

Demonstration Kitchens in Other Settings
Other non-educational institutions are following this trend by adding demonstration kitchens to their facilities (Henry Ford Hospital, 2016). Henry Ford West Bloomfield Hospital in Michigan has a demonstration kitchen and offers healthy cooking classes for adults and children. Their healthy cooking classes include samples, tips, recipes and advice from dietitians and physicians.

The Nutrition Resource Center at Boston Medical Center features a similar demonstration kitchen (Boston Medical Center, 2014). The kitchen was created to teach patients how to prepare foods consistent with a healthy lifestyle. Culinary demonstrations are hosted by a chef-dietitian and capture condition-specific nutrition education for an array of diseases and groups including cancer, diabetes, weight management, and cardiac rehabilitation.

University Partnerships
Utah State University (USU) created a partnership between the athletic department and university dietitians, providing a fueling station near the weight room of their sports performance center (Taylor, 2016). The fueling station offers a variety of snacks based on training needs, with donations supplied by local food companies and the university creamery. Dietetic, exercise science, and food science majors have all volunteered to give presentations to USU athletes.

Universities and hospitals are finding unique ways to reach out to their students, student-athletes, and community members, through hands-on food experiences. Using spaces like demonstration kitchens, fueling stations, gardens, and pop-up restaurants can be an innovative way to conduct presentations, provide culinary demonstrations, and offer cooking classes, teaching individuals about food, nutrition, and food preparation.

Demonstration Kitchen Research
Little research has been done with regard to demonstration kitchens and how they can be used to host successful culinary events. Although, Warmin (2009) found that execution of a culinary nutrition program by a nutrition educator and chef was an effective way to teach college students about food and nutrition at Clemson University. Students improved their cooking knowledge and self-efficacy related to techniques and behaviors. At Colorado State University, Levy and Auld (2004) found that cooking classes and a supermarket tour were more effective than a cooking demonstration for teaching cooking and nutrition. However, cooking demonstrations were found to be less expensive and less time consuming. These results indicate a need for additional research on the topic of cooking demonstrations and demonstration kitchens.

Objectives
A special event “Spring into Summer at the EMU Demonstration Kitchen” was held to promote the new demonstration kitchen to the community. The three objectives of the event were to:
1. Provide students with opportunities to apply their entrepreneurship knowledge and skills.
2. Market the EMU demonstration kitchen to the campus and local community.
3. Measure outcomes of the event through a survey of attendees.

METHODS
Along with courses, EMU CP students need real-world opportunities to practice their entrepreneurial knowledge through skill development. Planning and executing marketing plans for the demonstration kitchen are valuable tools to meet these outcomes. To assist in students’ entrepreneurial skill development, a dietetics faculty member received a $1,000 EMU College of Business Faculty Entrepreneurship Grant; the grant required a peer-reviewed journal article as an outcome and included $700 for the faculty member’s time and $300 for student mini grants. The faculty member had proposed offering $150 mini grants to assist dietetics students in developing and executing marketing plans but the timing of the grant award did not allow the faculty member to incorporate the project into the entrepreneurship courses.

A call for mini-grant proposals sent to dietetics students via email and announced in a CP foodservice management class yielded no submissions from the students. Therefore, the faculty member who was awarded the Faculty Entrepreneurship Grant contacted a graduate student enrolled in the EMU Master of Science in Human Nutrition program who was also a practicing registered dietitian and enrolled in a local community college culinary certificate program. The graduate student was interested in the opportunity and met with the faculty member to plan an event, develop a marketing plan, and develop an evaluation survey. The event plans were the student’s original ideas and the faculty member mentored the student and assisted in execution of the marketing plan publicity.

The event, “Spring into Summer at the EMU Demonstration Kitchen”, was designed to include two culinary demonstrations by the student and a guest speaker. It was marketed through a number of electronic routes. To begin with, a promotional flyer created by the student was sent to selected faculty, staff, and students. Concurrently, the faculty member distributed event information through the university calendar, daily campus email, EMU Today electronic newsletter, electronic billboards on campus, and the EMU website. In addition, the faculty member secured approval for students who chose to attend the event to gain one EMU general education Learning Beyond the Classroom credit toward their general education requirements. Furthermore, the event was promoted on social media through the EMU ONS Facebook and through the graduate student’s personal Facebook, Twitter, and Instagram accounts.

Along with EMU-based electronic advertising, the graduate student promoted the event through other effective avenues. For example, a press release was submitted to the Ypsilanti Area Convention and Visitors Bureau marketing campaign program, #YpsiREAL, in order to share event information on their social media sites. Additionally, flyers were posted on community business bulletin boards and distributed at local campus events, including the EMU ONS Annual Open House and 5K in March. The flyers were also available at the
American Cancer Society Relay for Life campus event and the Growing Hope Building Blocks for the Food Entrepreneur series at SPARK East Business Incubator in Ypsilanti, Michigan.

The student contacted local businesses to provide donations to use as handouts and take-home bags. Donated items included 50 insulated tote bags which were filled with spatulas, measuring cups, pens, and recipe booklets. Materials donated were distributed among the insulated tote bags and given to attendees upon arrival to the event. In addition, donated bottled water and individual fruited Greek yogurts were provided as snacks for attendees.

To evaluate if objectives were met and the success of the event, a survey was created with a five-point Likert scale to measure outcomes of the event (Figure 1); survey question options included strongly disagree, somewhat disagree, undecided/neutral, somewhat agree, and strongly agree. The survey was divided into three sections: What Did You Learn?; How Effective was this Presentation?; and, How Effective was the Speaker, Guest Speaker, Venue, and Handouts/ Gifts? At the bottom of the survey, blank space was provided as a comment section for additional feedback.

RESULTS
The event was held on April 18th from 5:00-7:30 pm at EMU Demonstration Kitchen. The event consisted of two one-hour culinary demonstrations with a 30-minute intermission. The intermission was originally scheduled to have a 15-minute presentation from a guest

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**Figure 1. Evaluation Survey for “Spring into Summer at the EMU Demonstration Kitchen”**

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<table>
<thead>
<tr>
<th>What Did You Learn?</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Unsure/ Neutral</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learned new information about nutrition, the nutrient benefits of specific foods, and/or how to maintain a general healthy diet.</td>
<td></td>
<td></td>
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<tr>
<td>I learned new food preparation techniques (meat fabrication, knife skills, etc.) and/or cooking skills (sautéing, steaming etc.).</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I learned new information about food safety.</td>
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<tr>
<td>I learned about healthy, affordable food sources (grocery stores, food pantries, etc.) in the community.</td>
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<tr>
<td>I learned techniques to cut food costs and save money on groceries.</td>
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<tr>
<td>I learned new recipes.</td>
<td></td>
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</tbody>
</table>

**How Effective Was This Presentation?**

| I will eat more fruits and vegetables as a result of this presentation.          |                |                |                 |                   |                  |
| I will eat more whole grains as a result of this presentation.                   |                |                |                 |                   |                  |
| I will eat more lean proteins and low-fat dairy (and/or alternative dairy) foods as a result of this presentation. |                |                |                 |                   |                  |
| I will add at least one of the nutritious foods used or discussed in this presentation to my diet. |                |                |                 |                   |                  |
| I will practice at least one of the food preparation techniques (meat fabrication, food pantries, etc.) and/or cooking skills (sautéing, steaming, etc.) as a result of this presentation. |                |                |                 |                   |                  |
| I will visit at least one of the healthy, affordable food sources discussed in the community (grocery stores, food pantries, etc.) as a result of this presentation. |                |                |                 |                   |                  |
| I will apply at least one of the grocery cost saving techniques discussed as a result of this presentation. |                |                |                 |                   |                  |
| I will try one of the recipes I learned today at home as a result of this presentation. |                |                |                 |                   |                  |

**How Effective was the Speaker, Guest Speaker, Venue, and Handouts/ Gifts?**

| The main speaker executed the culinary demonstration successfully and the presentation was easy to follow and understand. |                |                |                 |                   |                  |
| The main speaker was knowledgeable on the topics presented.                                                                 |                |                |                 |                   |                  |
| The main speaker effectively answered my questions (if any).                                                                    |                |                |                 |                   |                  |
| The guest speaker provided valuable information to me.                                                                          |                |                |                 |                   |                  |
| The guest speaker effectively answered my questions (if any).                                                                   |                |                |                 |                   |                  |
| The EMU Demonstration kitchen is an effective venue to conduct this presentation and similar presentations.                   |                |                |                 |                   |                  |
| The gifts and handouts provided were related to the topics presented and I will utilize these materials to apply what I learned today. |                |                |                 |                   |                  |
| I would attend another event like this at the EMU Culinary Demonstration Kitchen.                                                |                |                |                 |                   |                  |
speaker to share information about local food sources and growing food at home, followed by a 15-minute break for event attendees. Unfortunately, the guest speaker was unable to attend so the first culinary demonstration was extended for an additional 15 minutes.

The budget for this event provided $300; $107 for groceries and supplies and $193 to the graduate student as a professional fee. Supplies and groceries for the event were purchased from local grocery stores and a produce market.

Two EMU undergraduate dietetic students, a friend of the graduate student, and the faculty member assisted on the day of the event. The dietetic students were completing supervised practice hours in the ONS.

The event was planned for a maximum of 50 attendees and additional chairs were on hand from the ONS to supplement the demonstration kitchen’s 26 seats. Attendees (n=40) were a diverse group of faculty, staff, students, and a few friends and family of the graduate student (Figure 2). Almost all attendees were students or employees of the university. Twelve attendees were students from various academic majors who received one university Learning Beyond the Classroom credit as a result of attending the event. Remaining insulated bags were given to dietetics program preceptors.

During the event, attendees sat and watched, but questions and open dialogue were encouraged throughout by the presenter. The culinary demonstrations focused on teaching audience members healthy eating tips based on the 2015-2020 Dietary Guidelines for Americans, the United States Department of Agriculture’s MyPlate, food safety and sanitation recommendations, knife skills, nutrition facts, and research associated with the recipes’ ingredients. The first culinary demonstration was designed to teach attendees chicken fabrication, stove-top pan cooking, whole grain preparation, and soft drink beverage alternatives. Recipes prepared during the first demonstration included chicken scallopine, farro, sautéed kale, watermelon salad, and carbonated cranberry juice soda. The second culinary demonstration focused on knife care and meat thermometer use. Recipes prepared during the second presentation included a Southwest-themed salad and blackened chicken.

**Survey Results**

Thirty-two attendees completed the survey at the end of the event. Twenty-nine attendees (90.6%) strongly agreed with the statement, “I learned new information about nutrition, the nutrient benefits of specific foods, and/or how to maintain a general healthy diet.” and 96.9% (n=31) strongly agreed with the statement, “I learned new food preparation techniques and/or cooking skills.” Furthermore, 93.8% (n=30) of attendees who responded to the survey strongly agreed and somewhat agreed that they learned new information about food safety; 96.9% (n=31) strongly agreed and somewhat agreed that they learned about healthy affordable food sources in the community; and 96.9% (n=31) strongly agreed and somewhat agreed that they learned new techniques to cut food costs and save money on groceries.

In the “How Effective was this Presentation?” section of the survey, attendees responded that they would engage in healthy eating habits as a result of the presentation. Approximately, 78% (n=25) strongly agreed that they will eat more fruits and vegetables as a result of the presentation. Over 84% (n=27) strongly agreed that they will eat more whole grains as a result of the presentation. Furthermore, 71.9% (n=23) of attendees responded that they strongly agreed that they will eat more lean proteins and low-fat dairy foods as a result of the event.

Figure 2. Photo of “Spring into Summer at the EMU Demonstration Kitchen” event
All of the attendees (n=32) strongly agreed that the EMU Demonstration Kitchen is an effective venue to conduct the “Spring into Summer” event and similar events, and that attendees would attend another event at the EMU Demonstration Kitchen. Although evaluation results of this single event cannot be generalized, they were very positive and there is reason to believe that similar events would lead to positive results and increased nutrition knowledge for attendees.

CONCLUSION AND APPLICATIONS
The faculty member strengthened mentoring skills and event planning skills. Although the faculty member intended to involve more than one student, the lack of response from students necessitated an alternate plan; educators are skilled in changing plans to accommodate unforeseen circumstances. The student-created evaluation survey was long and the faculty member doubted whether attendees would complete it but the response rate was high. The survey did not address the marketing of the event and ease of finding the kitchen; this was an oversight. The faculty member offers the following tips for educators:

- Be flexible when original plans change
- Allow student creativity to flourish
- Support student initiatives and special events
- Proofread student-created flyers and other materials
- Trust students to create evaluation surveys

This successful event allowed the graduate student and faculty member to work closely together in accomplishing the objectives of the project. Through the planning and execution of this event, the graduate student strengthened entrepreneurial skills including planning, marketing, public relations, and culinary demonstration presentations. The student was also able to co-author and revise a peer-reviewed journal article. Educators can use the results of the project to create opportunities for student and educator collaborations that will enhance application of entrepreneurial knowledge and marketing skills as well as build awareness of dietetics services and facilities.

REFERENCES