SUSTAINABLE KITCHEN

ENVS 4100: Appropriate Technology and Sustainability
The Campus as a Living Learning Laboratory
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I. Executive Summery

Through this project our team explored unsustainable food issues on Western Michigan University’s campus and we identified the dietary, culinary creativity limitations on campus. In today’s society especially on campus students are moving away from “traditional diets” and are moving more towards more restricted diets including vegetarian, vegan, and gluten free. This was also made evident by the efforts of previous ENVS 4100 students; Taylor Sawyere, Conor Downey, Marianne Twork, Nora Gimpel along with many others. Previous students laid the groundwork foundations that we have built on in an effort to keep the project moving forward, we seek to continue working past issues that have been problems areas in the past to overcome. With the preliminary research done by previous ENVS 4100 classes we were able to begin our research on other successful open kitchens on other campuses.

Unsustainable food on campus is ready to be addressed with a collaborative university effort. We feel that the issue of our campus lacking an adequate space for students and faculty to experiment with sustainable culinary conditions and creativity is one ready to be solved. Our open kitchen concept will provide students with a space to prepare healthy and dietary friendly meals, while also promoting a sense of community and culture among students. It also promotes recruitment and retention, showing future students a positive space on campus that will allow for healthy choices, and provide an atmosphere that promotes education on sustainability and health. Currently on Westerns campus the opportunity to celebrate and embrace the incredible diversity of student’s talents, creativity and culinary curiosity are very limited. To promote such a sustainable culture on campus our team is proposing to create and open kitchen for students to utilize as a living learning laboratory growing not only as an individual but also as a student community.

Over the past few years it has become a growing trend for Universities to reach out and encourage students to demonstrate their leadership in a hands on environment. While student’s dietary diversity is becoming more vast, the options on campus are remaining the same. This puts Western in position to join other leading universities in establishing more student-led kitchens that would address the dietary needs of students while also creating a sense of community and learning. WMU has been a progressive leader in sustainable changes on campus and implementing a student led open kitchen would not only help the campus continue incorporating sustainable practices throughout campus, but would also be a place for the student body to grown and learn together creating a sense of community and culture.

Throughout the duration of the spring 2016 semester, we have meet with a number of administration personnel for insight and ideas on a location for a trial run open kitchen. After much consideration and collaboration, we have decided to digress from a trial run and focus
our efforts instead on gathering student opinions, and building an information database for future open kitchen or campus café ideas to build on.

II. Introduction

Our team aims to create a sustainable open kitchen for all disciplines of students and faculty. Our open kitchen concept would provide students a space to create healthy, sustainable foods side by side with their peers and faculty members, while being able to embrace dietary diversity and international culinary practices. This open kitchen is a space for the WMU community to grow and learn together through sustainable cooking and events.

Past projects have focused on a student run café and faced several obstacles. These students were treated like an outside business by administration that required detailed business plans, and monetary contributions for rent and utilities. Our team is seeking to make a collaborative University effort involvement to try and overcome some of the obstacles faced in the past.

We hope to influence WMU administration to understand and promote our idea. We need decision makers to realize and help us change the status quo on campus about healthy eating options and sustainability. Currently there ample options on and around campus for eating out, such as Subway, Pita Pit, Buddha Belly, Biggby and on the campus cafeterias to name a few. These establishments offer students a variety of choices, but do not provide a healthy, local, dietary friendly option or celebrate the incredible diversity of student’s talent and creativity in the culinary arts. Hidden on campus are a few small, ill-equipped kitchens in some of the dorm buildings, and a few other buildings scattered around campus (Richmond, Sangre, Lee Honors College). These isolated spaces are only adequate for no more than one individual to cook, limiting the sense of community and collaboration that could occur while exploring the culinary arts.

President Dunn signed on to the ACUPCC (American College & University Presidents’ Climate Commitment) in 2009, pledging climate neutrality through set goals. The Talloires Declaration promotes our idea of opening sustainable kitchen. According to the guidelines WMU has agreed to take action in ten different ways. Some of these actions include increasing awareness of environmentally sustainability, create an institutional culture of sustainability, collaborate for interdisciplinary approaches, and maintain the movement with work towards the other goals as well. Our main goal is to create movement towards a more distinguished sustainable culture through education and hands on experience that everyone can relate to.

In the WMU campus Master Plan of 2001, many of the primary goals we are working toward implementing. The open kitchen would help to achieve the first goal of creating a “sense of place.” We are hoping to make the atmosphere like the student population at WMU unique and
creative. We strongly believe that our open kitchen space will not only draw in students but also increase retention, due to it being the first open space to embrace the vast numbers of dietary diversity’s and international culinary culture.

Our project also fits into the WMU Academic Affairs Strategic plan because one of its goals is “Student centrality in premier undergraduate and graduate education encompassing the arts, sciences, and professions.” We plant to focus on the student creativity and passion to help create an environment conducive to growing and learning as individuals and a community. In doing so this creates a space not only where faculty teach students, but where students teach students.

We feel that even though we ae going to have many hurdles and people to convince, our project will directly and positively impact a sense of campus community by; increasing healthy food options, celebrate the incredible diversity of students talents and creativity in the arts, embrace sustainable food practices and help students grow closer as a community by teaching and learning life skills from one another.

III. Methodology

We started by researching past Appropriate Technology and Sustainability (ENVS 4100) projects and found numerous student reports addressing the need for a sustainable student centered café. By gathering information form these projects we gained a better understanding of the obstacles past projects faced and current problems. While our team was finalizing our vision of the open kitchen we encountered some dialog that was not very encouraging, however this dialog gave us insight to more of the issues we would need to overcome. After becoming familiar with our previous efforts towards a student led café we decided to take a different approach, by pursing an open kitchen with a collaborative university involvement. Efforts form a number of departments will be necessary to ensure long term success. The dietetics department, specifically Frank Cordero a well-educated Chef who showed extreme interest in the creative learning aspect of our project while focusing on sustainable food choices and is ready to help move our project forward. Other helpful faculty included Caroline Webber and Matt Schnarr, among other. Student Affairs, Dietetics, The Valleys, and Dinning Services are also important for us to continue working with.

As an initial step in our project we met with Fran Cordero of the Dietetics, we talked about the variety of options that could be accomplished with an open kitchen. After conversing with staff and students we decided to seek student support to back our effort. We focused on developing a survey that would gage WMU student’s interest in utilizing an open kitchen on campus. Many drafts were developed and refined to create one that was easy to understand and complete,
while still yielding useful data. After the final draft of the survey was developed we posted our 5 question survey on the Internet, using “Survey Monkey”. This survey was able to be taken for three weeks. Our team used multiple tactics to reach the student body with our survey which included sending the survey URL to students in other classes, hanging posters around campus with the survey URL, and making multiple posts on Facebook with a link to the survey.

IV. Best Practices On Campus

The Campus Beet

The Campus Beet was created to offer fresh, delicious, and ecologically sound food, to build the local economy and to support the WMU community. The open kitchen will allow Campus Beet to move out of the Wesley Foundation basement and provide a space for the Campus Beet to grow and educate more students. The Campus Beet has evolved into a RSO (Registered Student Organization) on campus that hold weekly lunches to promote a healthier more sustainable campus. All of the meals prepared by Campus Beet are made from locally sourced ingredients and are vegetarian friendly.

Before the Campus Beet became established and successful it faced many challenges and problems. Although the Campus Beet charges three dollars per lunch it is not making a profit or losing money, but making just enough to perpetuate the lunches. Due to the Campus Beet being an RSO it also lacks collaboration with the university, this combined with lack of profit has left them at a standstill. Yet another problem that is faced by many RSO’s on campus is the high student turnover rate due to graduation. When leaders of RSO’s graduate sometimes the drive forward slows down for one reason or another making it harder to keep a clear goal in mind. The many obstacles and challenges that the Campus Beet has faced are great example to learn from.

Spatial Analysis

The Special Analysis was completed by Brian Balconi, in this report he examined potential Café locations on campus. He established a ranking system to measure the features important for a café location such as; utilities, ventilation, lighting, traffic, and kitchen hardware. Nine locations were investigated all together and the best location was determined to be the Student Service Center.

Farm to table and sustainability (FCS 4720)

Frank Cordero is offering a farm to table and sustainability course in the fall of 2016. This course will embrace the whole spectrum of sustainability, making connections with the
farmers, purchasing local produce and poultry at the farmers markets, and how to prepare the fresh ingredients.

This course looks at how the vitality of America’s communities are bound to the successes and failures of its farmers. Agricultural and operation issues address the delivery of fresh, local food and how the lives of farmers and communities have changed as we work to create healthy soil, healthy animals, and healthy food. In context of federal policy this course examines growing competition from abroad, public misconceptions regarding government subsidies, the dangers of environmental damages and genetically modified crops, and the myths of modern economics are addressed (WMU Course Catalog).

V. Best Practices on Other Campuses

Campus Kitchen

The Campus Kitchen project aligns with our values of sustainability and connecting to the community. This project practices food recovery where the volunteers pick up unused, quality food from campus dining providers as well as local grocery stores, food banks, and farmers markets. To prepare meals the volunteers will use donated kitchen space to prepare balance and nourishing meals. Later the meals will be delivered to organizations who help low-income families and individuals. The Campus Kitchen project empowers the community through creating programs such as culinary job training for the unemployed or underemployed, healthy cooking classes for families and nutrition education for kids. In most locations where the Campus Kitchen program has been implemented they also have helped develop a sense of community while teaching, learning and growing together. We discovered this project through looking at the University of Minnesota Bemidji and University of Massachusetts Boston.

Dong Hwa National University in Taiwan

This university has an eco-kitchen that offers students the chance to prepare healthy, sustainable meals under the supervision of their professor, Sung Bin-min. The students are taught about the food to table movement in their class, and even go directly to the farm to further the experience. All the produce is purchased directly from local organic farmers at a fair wage and are used to make healthy delicious meals.

Kalamazoo Valley Community College

Kalamazoo Valley Community College is the first college to offer a culinary degree in the Kalamazoo area. This degree focuses on sustainable food systems, integrating best practices of agriculture, food preparation research and technology, and a transformative power of education to improve the health and well-being of the community.
VI. Discussion

Western Michigan University is working on building a culture of sustainability while continuing to implement practices that not only better the student body, the WMU campus and the world. Our main goal is to make an open kitchen for students and faculty to embrace the dietary diversity and international culinary practices while learning sustainable cooking practices. This will promote sustainability on campus by providing: healthy food options, educational experiences not only faculty to student, but also student to student, student interaction in a creative environment, supporting the local economy, and student retention. The services provided by the open kitchen will allow the WMU community to collectively come together and make a positive impact on the future of not only our campus but our world.

Many typical American diets focus on processed, modified, pesticide sprayed foods that can cause deterioration in health over time. Many students call for a change in diet with reduced meat consumption, leading to a more vegan and vegetarian diet choice. In more recent years there has also been a movement towards organic, local, gluten free, and non GMO foods. Students who choose a specialized diet or are restricted by an allergy have a very limited number of options on campus. Our open kitchen would offer options for students who struggle to find options to suit their dietary needs.

The 2014 Student Sustainability Survey identified that students are looking for “more healthy food option on campus”. The open kitchen would offer students an opportunity to prepare meals that meet dietary restrictions while learning and growing as a student community. Besides offering healthy food choices and educating students, our open kitchen would also allow students to consume food sourced by the local economy in turn creating a greater sense of community for the whole Kalamazoo area.

Our team developed a mock week schedule for our open kitchen and have elaborated on the ideas below.
WMU Chopped Kitchen Contest

The WMU chopped kitchen contest will provide students an opportunity to show off their cooking skills by competing against others. For each competition students will prepare one dish with a predetermined main ingredient such as tofu, chicken, turkey, etc. This competition will raise student awareness of the many dietary diversities and international cultural practices we have on campus.

The winner of the competition will then have the opportunity to teach other students how to prepare their dish. This will creates a sense of culture and community that embraces learning and growing together while learning life skills and sustainable practices.

Classes

The open kitchen will provide endless opportunities for education not only faculty to students, but also student to student helping to create a greater sense of community. A number of classes can be taught in the open kitchen including; Co-op canning classes, sustainable food practices, WMU chopped kitchen winner can teach other how to prepare their dish. By educating the community as a whole the open kitchen will help influence students to make healthier more sustainable choices.

Campus Beet

By moving Campus Beet out of the Wiley foundation basement and into the open kitchen it open a number of possibilities. Some of these possibilities include educating more students on healthy and sustainable food choices and practices.
Pot luck

Practicing sustainable business will make our local community stronger. By using local farmers and food vendors we will strengthen the local economy. After the farmers market students are encouraged to use the open kitchen time to prepare a dish to pass using their fresh produce and poultry from the local farmers market. A potluck will promote a sense of community and sustainable culture that embraces locally grown goods.

Open kitchen time

Open kitchen time is a time for students to embrace their talent and creativity in the culinary arts. This is a time and space for students to grow and learn together creating a stronger sense of community. By embracing student talents and delivering a venue in which they can express themselves, students can grow not only as individuals but also as a campus community.

Themed Dinners

Themed Dinners are an option for students to experience sustainable healthy food options on campus. Each month will have a different theme example include; spaghetti night, international night, vegan night etc. Having these themed dinner in an open kitchen environment will provide student with the opportunity to embrace other dietary options and learn about locally grown produce and poultry and how to prepare them also helping to creating a sense of community and relationships around a common interest.

VII. Limitations of our Analysis and Future Work

The final version of the open kitchen includes collaboration between the students and the University for a number of reasons. Due to the size and magnitude of this vision it would be extremely difficult to accomplish strictly by students. In theory, the idea is to have an open kitchen where students can come and learn, create and grow in the culinary arts learning valuable life skills in a relaxed and friendly environment. After researching further it only solidified our want for student and university collaboration. Including the university helps to tackle problems such as being the highest bidder on the space, paying for rent, and renovations. Our goal is to have as many students involved in the open kitchen as possible, however with such high levels of students graduating after each semester a completely student run kitchen would lose momentum and the willingness to keep the kitchen open would decrease as students leave. The open kitchen idea has built on other ideas and will continue to lay the groundwork building brick by brick to help progress and improve over the years. A project of this magnitude requires a consistent management system in order to be successful,
and will require a permanent management and advisory staff to keep the vision on the right path.

We reached out to multiple people to ask questions, and bounce ideas off of, however this was one of our major obstacles due to scheduling constraints or not being able to get a response from an individual. We faced other obstacles such as cohesiveness of our idea, and being asked questions we did not know the answer to. We were able to overcome this by laying out a clear and concise idea, with a clear goal in mind it was easier to answer questions and explain our idea to others helping us move the project forward. Another limitation of our analysis was the amount of students reached with our survey. We only were able to survey eight students out of a student body of nearly 25,000. The small amount of responses is most likely due to multiple causes; limited time the survey was available, methods of distribution and lack of publicity. Our survey also was limiting in the fact that its main target was undergraduate students, we recommend for future work to get a survey out early and focus on gathering more conclusive survey data. It would also prove to be beneficial to reach out to faculty, staff and graduate students as early as possible to ensure a time for a meeting.

**VIII. Conclusions and Recommendations**

In conclusion, we feel that with hard work and persistence, our open kitchen or student run café can be accomplished and implemented on Westerns campus. Our open kitchen concept would fit into the large system of sustainability on campus and the local community. We believe that with growing dietary restraints and limiting options the student population would greatly benefit from an open kitchen. With Western being a leader in sustainable practices the next step would be to tackle the unsustainable food options on campus.

Based off our research, we have few recommendations. The first would be that Western Michigan University implement a team of students from different disciplines to bring together multiple specialized talents and skills. We also recommend a team of faculty and administration to help make the open kitchen happen. If both the administration and students collaborate together to plan meetings and exchange ideas there is a higher probability of the project moving forward. Without the collaboration between students and administration this goal will be extremely difficult to obtain, but together as a community we can learn grow and become more sustainable.

**IX. Works Cited**


KVCC Culinary arts and sustainable food systems. Web. 
https://www.kvcc.edu/programs/human/casfs.aas.php


http://www.wmich.edu/sites/default/files/attachments/u159/2014/%20%20140613%20FINAL%20CAFE.pdf


X. **Appendices**

a. **Appendix I: Contact Information**

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b. **Appendix II: Contacts**

**WMU**
Caroline Webber –Dietetics caroline.webber@wmu.edu 
Arezoo Rojhani-Dietetics arezoo.rojhani@wmu.edu 
Frank Cordero –Dining services Francisco.cordero@wmu.edu 

**Food Network**
Jack Clifford –founder of the food network 

**Campus Kitchen**
Matt Schnarr-campus kitchen project m.schnarr@campuskitchens.org

C. **Appendix III: survey**

1. Would you be interested in competing in a cooking contest on campus against other students? 
   a. Extremely interested 
   b. Slightly interested 
   c. Not interested

2. If you won a contest would you be interested in teaching other students and community members how to prepare your dish?
a. Extremely interested  
b. Slightly interested  
c. Not interested  

3. What time of day works best for you to participate in a cooking class or competition?  
a. Monday Afternoon 12:00-5:00 Evening 6:00-9:00  
b. Tuesday Afternoon Evening  
c. Wednesday Afternoon Evening  
d. Thursday Afternoon Evening  
e. Friday Afternoon Evening  
f. Saturday Afternoon Evening  

4. What dishes would you be interested in preparing or learning how to prepare?  

5. Would you be interested in using an open kitchen on campus?  
a. Extremely interested  
b. Slightly interested  
c. Not interested  

6. Do you have any other suggestions or concerns?